The American Artisan
And Hardware Record

Vol. 48—No. 5 CHICAGO, JULY 30, 1904. $3.00 Per Year.

BOMMER SPRING HINGES

BOMMER BROTHERS, Manufacturers, (Established 1876) 256 to 276 Classon Ave., BROOKLYN, N. Y.

BOLTS

NUTS, WASHERS, CLIP TIES, FELLOE PLATES, CORNER IRONS AND
CARRIAGE FORGINGS
Write for our general Catalogue
COLUMBUS BOLT WORKS, Columbus, O.

Tinners Find Employment
By advertising and using
THE POWERS AUTOMATIC CHIMNEY TOPS
They make chimneys draw, give Tinners employment making stocks, and give the dealers profit. Sold by Hardware Jobbers and Dealers
Made only by
POWERS BROS.
Streator, - Ill.
This cut free to dealers.

The Atlas Bolt & Screw Co.
CLEVELAND, O.
Stove Bolts, Rivets, Rods
And Kindred Articles
Catalogue and Prices on application

LEAKY ROOFS

Are expensive to repair, and if neglected will cause a considerable amount of trouble. If a roof has some small leak or break, have it fixed at once or it will give trouble in the near future. In order to stop these leaks it is necessary to obtain

Elastic Oil Cement—American Seal

brand—and apply it to any leak, small or large. It never hardens. Prices for "American Seal" Elastic Oil Roofing Cement and Roof Paint are reasonable and we feel sure that if you write for them they will interest you.

Agencies: J. L PERKINS & CO., 235 Lake St. CHICAGO, ILL.
STOCKHOFF SUPPLY CO., 107 N. Main St., ST. LOUIS, Mo.

A man once lamented that he could not cross a river. "You overgrown idiot, don't you see that rowboat?" said a bystander. Many a small manufacturer wails mournfully that he "cannot reach the trade"—when there is the trade paper on his desk.

Black Diamond Files and Rasps
PERFECT—ALWAYS

TWELVE MEDALS AWARDED

AT INTERNATIONAL EXPOSITIONS

G. & H. BARNETT CO.
Black Diamond File Works, PHILADELPHIA

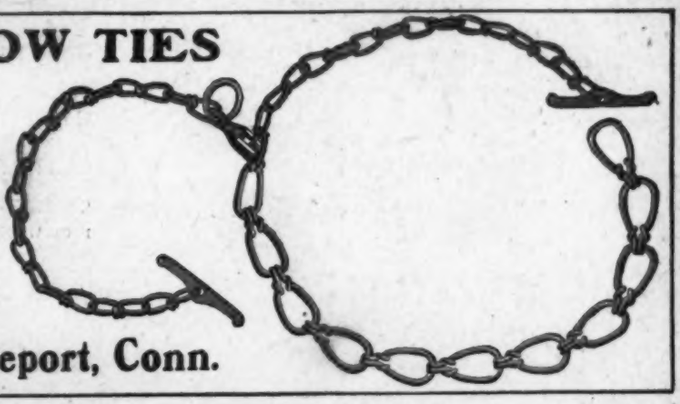
BROWN WELDLESS COW TIES

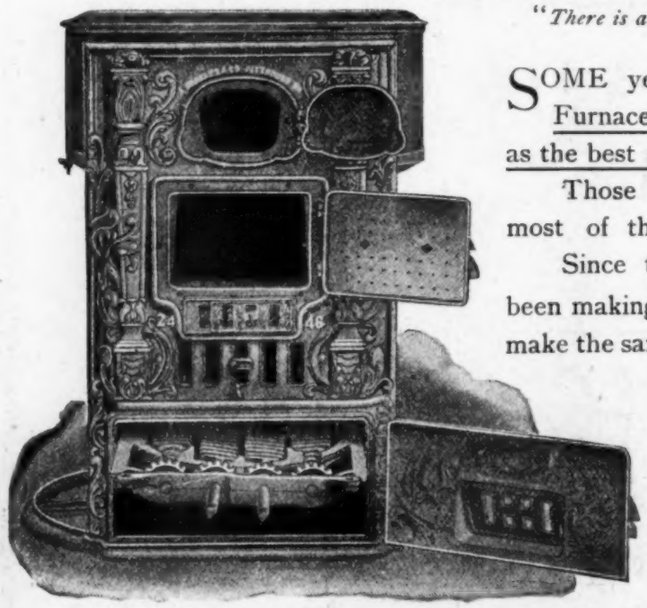
Twice as strong as welded chain.

A sample (full length) delivered for **one cent.** Any Retail Dealer sending postal card request with name of Jobber secures sample prepaid.

Sole Manufacturers

The Bridgeport Chain Co., Bridgeport, Conn.





"There is always one by which the others are judged."

SOME years ago we completed The Etna Furnace and offered it to the public—as the best proportioned furnace ever built.

Those who knew us best or had seen the most of the furnace believed our statement.

Since that time The Etna Furnace has been making history and friends. Now when we make the same proposition in public, almost anybody is ready to second the motion.

For no other Furnace of equal height and grate surface has any where near the same amount of Radiating surface or same length of Fire Travel, and these are the things that make heat that's cheap. If you will examine this Furnace you will think as we do. We offer prompt delivery and close prices.

The Best Proportioned Return Flue Furnace Ever Built.

Firepots	Casings	Fire Travel	Height	Weight
18"	36"	11 ft. 8"	47"	751 lbs.
21"	40"	12 ft. 7"	48"	975 lbs.
24"	46"	13 ft. 8"	52"	1219 lbs.
27"	52"	15 ft. 2"	52"	1649 lbs.
30"	60"	17 ft. 3"	55"	2080 lbs.

Firepots are straight — Weights are scale weights — (Steel Radiators)

PITTSBURGH STOVE & RANGE CO., PITTSBURGH, PA.

The Model Hot Blast

Is a new Air Tight Built Stove, regularly supplied with Hot Blast Tube, but can be used without tube.

Bristles with special features—such as inside register protector, substantial perforated mica protection, handsome turn key, etc.

See cut for nickeled parts.

The Model Radiator

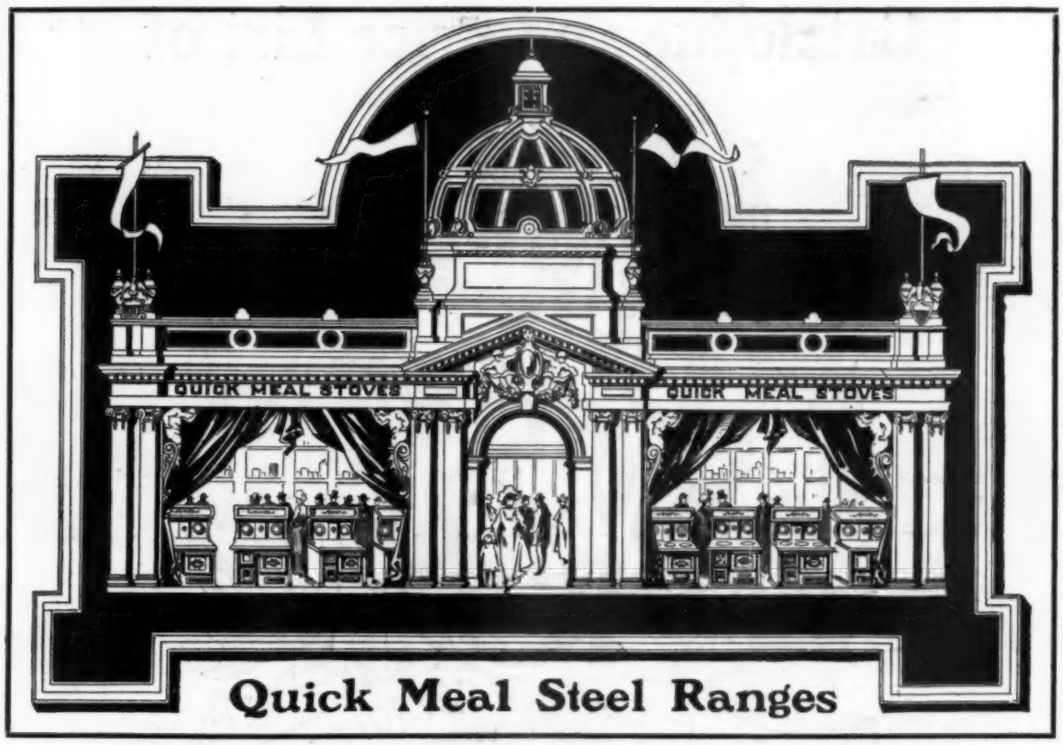
For Hard or Soft Coal. Embodies new ideas of conspicuous merit.

THE PORTSMOUTH STOVE & RANGE CO.
Portsmouth Ohio.

MORLEY BROS., Saginaw, Mich.
Wholesale Agents for Michigan.

82,000

People have visited the Quick Meal Steel Range Exhibit since the opening day, and every one of them expressed their appreciation in finding an exhibit so unlike and so superior to anything else on the grounds



As Shown in the Manufactures Building of the Great St. Louis World's Fair

ALL VISITORS ARE WELCOME

This exhibit is attracting great attention and favorable comments from all those who have seen it. The Exhibit, like the "QUICK MEAL" STEEL RANGE, is different in construction from any other and is distinctively and individually its own.

The Ranges are set in line on platforms, and the Oven Doors are arranged to open and close automatically, showing baking and roasting in its different stages. The Ovens are arranged so as to present the articles baked or unbaked alternately when the Oven Door opens.

"QUICK MEAL" STEEL RANGES are noted for their own individual features. This makes it easy to sell them and gives the Dealer a Range different from that which his competitor may handle.

RINGEN STOVE CO.

DIV. OF AMERICAN STOVE CO.

ST. LOUIS

SAN FRANCISCO, CAL.
45 and 47 Bluxome St.

PORTLAND, OREGON
4th and Davis Sts.

"Good Specialties are Money Makers"

The 1904
Catalogue and Price List of

Showing entirely new and original patterns in every line, which in handsome appearance and individuality of design have never been equalled, is now ready for distribution.
Copies will be mailed and discounts quoted to the trade upon request.

The Art Stove Company,

DETROIT
1543-1559 Russell St.

CHICAGO
79-83 South Jefferson St.

No. 1

Radiant Gem BASE BURNER

MADE IN 3 SIZES—13, 15, 17.

Very elegant design. Has pull-out fire pot. Made in best nickel or oxidized. Word oxidized is a new feature to many dealers and is fully explained in our catalogue.

No. 2

GEM OAK

Side Wings, Nickel Feet and Nickel Swing Top.

Made for Hard Coal, Soft Coal, or Wood.

SIZES
10, 12, 14, 16, 18, 18½.

No. 3.

GEM OAK

Plain without extras as shown in Gem Oak No. 2.

SIZES, 10, 12, 14, 16, 18, 18½.

No. 4, STAR GEM

Made in 5 Sizes—11, 13, 15, 17, 19.

No. 5, VICTOR GEM

These two lines of oaks, Nos. 4 and 5, are our cheap line of Oaks. To convince yourself write for cuts and prices.

Made in 5 Sizes—11, 13, 15, 17, 19.

Toledo Stove & Range Co., Toledo, O.

Don't You Want Your Neighbor's Wife

and Children

To Keep Warm and Comfortable in Cold Weather?

Then sell her husband a

WHITE'S BEACON

BEAUTIFUL IN DESIGN

CAREFULLY MOUNTED

We have the strongest testimonials in praise of this wonderful stove.

Burns the smoke, the gas, and any kind of fuel.

Write us about it.

THOMAS WHITE STOVE CO.

QUINCY ILLINOIS

OUR LINE OF STEEL RANGES AND HEATERS

581. 18 Champion Monitor Reservoir and High Closet.

Has been greatly improved during the present season, and you will be delighted with the finish and style of our new goods.

Our new Hot Blast Oak is a beauty and the price is right. Send for sample. If you are not pleased with it, it will belong to us. Catalogue sent by request.

Monitor Hot Blast Oak No. 147

THE WM. RESOR & CO., CINCINNATI, OHIO

The LE MONITEUR

and like it's

Great Parisian namesake,

a leader.

Not in the front rank, but in the front of the front rank, leading all others.

Order your sample—You are going to need the easiest selling steel range made, and lots of them.

Write for prices.

We are here to answer you.

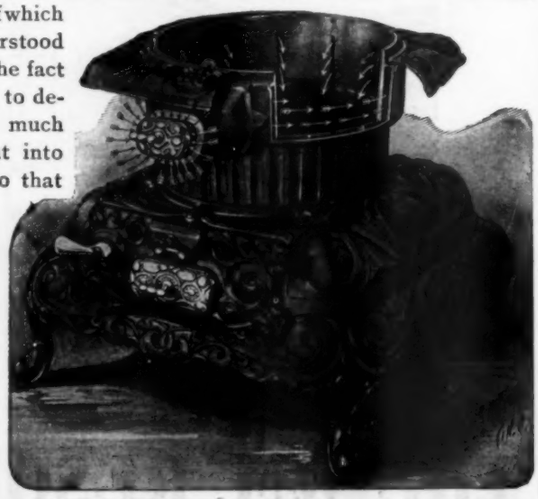
Ashland Steel Range & Manufacturing Co.

The Wormnest Stove & Range Co.

Agents for Michigan.

CLERMONT AIR TIGHT HOT BLAST

Made in four sizes, 414, 416, 418 and 420 for soft coal, slack, coke, hard coal or wood. Air tight jointless ash box. A great fuel saver carrying fire for 48 hours. **THE CLERMONT AIR TIGHT HOT BLAST FIRE BOWL, HOT BLAST RING,** is moulded in one piece. Narrow perpendicular slots are cast in the Anti-buckling ring, the advantage of which will be quickly understood when you consider the fact that it is impossible to determine just how much coal will be put into the fire bowl, so that it makes no difference whether much or little coal is added, the hot air is always being admitted evenly on all sides.



GEM CITY STOVE CO., Dayton, Ohio

THE EASY LINE TO SELL. 74 JOLIET STOVE WORKS, Joliet, Ill.

SPECIAL
No. 218

Different in construction from any other stove in the market.

THE ONLY REAL SPECIALTY

The only stove in the market having a

DUST FLUE

in connection with a

HOT BLAST RING

outside of fire pot.

We do not believe this stove can be made to **PUFF**

It burns

HARD COAL, SOFT COAL or COKE

equally well.

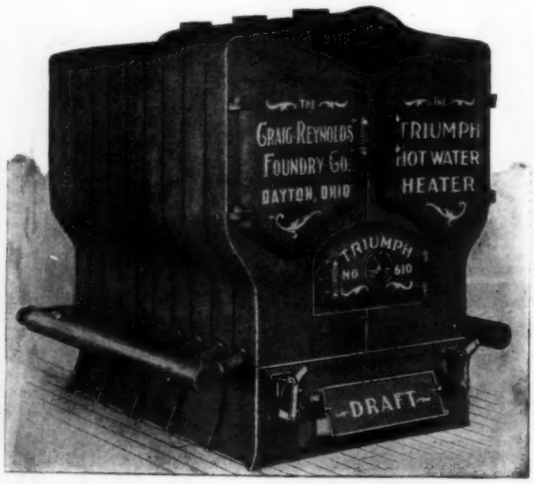
THE RICHEST TRIMMED STOVE MADE.

Fine enough for any parlor.
Send for Catalogue and prices.

Made only by

MARION STOVE CO.

MARION, INDIANA.



Triumph HOT WATER HEATER

JOHN KONTNY

65-67 N. Desplaines Street,

Western Agent. **CHICAGO**

If you wish the best Known

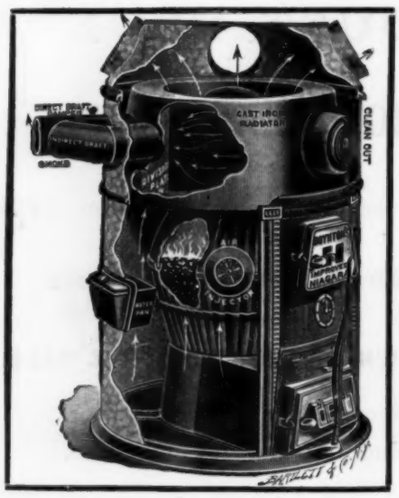
Hot Air Furnaces

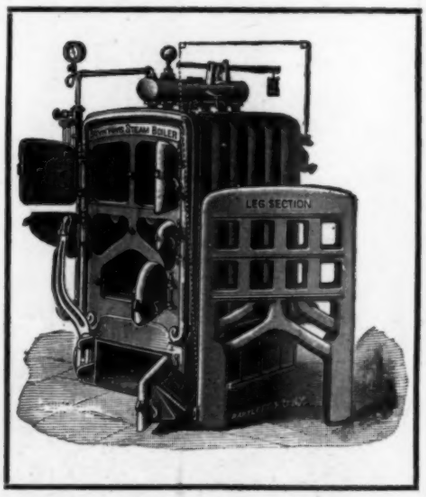
Steam and Hot Water Heaters

and the largest stock and varieties to select from, send for **THE BOYNTON FURNACE CO'S.** CATALOGUE, which is complete. There may be others, but the genuine

BOYNTON HEATERS

are sure to be right.



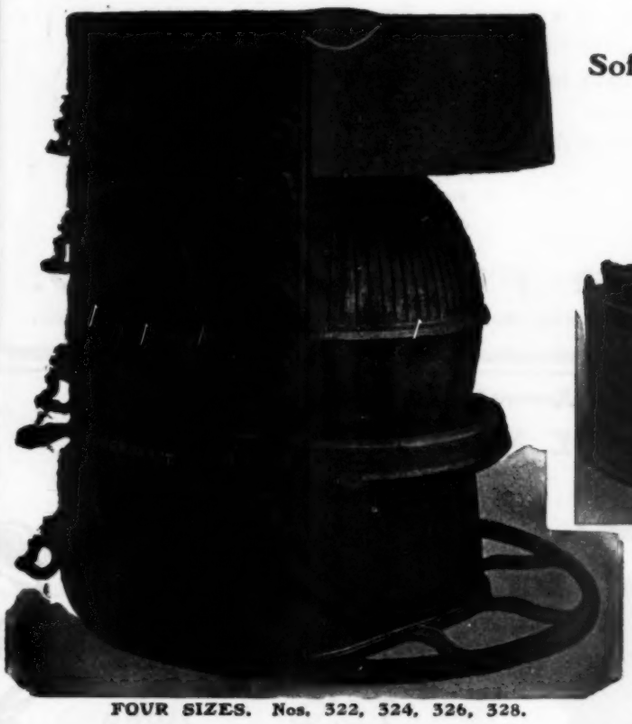


The BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO **207-209 Water St., NEW YORK**

THE RADIANT HOME FORCE DRAFT FURNACE

Original Air Blast Fire Pot with Force Draft Ring

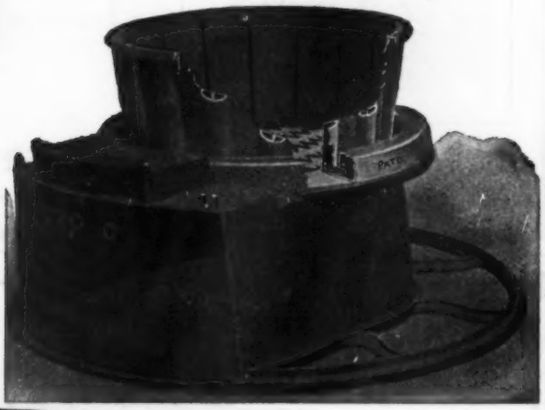


FOUR SIZES. Nos. 322, 324, 326, 328.

Burns every Kind and Quality of

Soft Coal, Coke and Lignite.

PERFECT COMBUSTION.



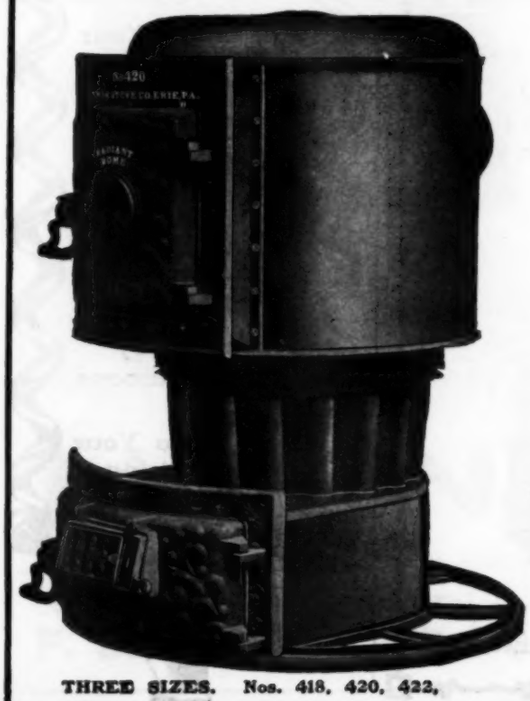
Soft Coal Burned as Cleanly as Hard Coal.

LARGE ONE-PIECE RADIATOR
LARGE DOUBLE FEED DOORS

Most intense heat with cheapest grade of fuel.

FIRE POT GUARANTEED FIVE YEARS.

Only Correct Method for Burning All Kinds of Soft Coal.



THREE SIZES. Nos. 418, 420, 422.

A LEADER

High Grade, Low Price, Powerful Heater

For Soft Coal, Hard Coal, Coke, Lignite and Wood.

AIR BLAST FIRE POT. LARGE HEAVY RADIATOR.
EXTRA LARGE FEED DOOR.

Can be sold at Retail at less than wholesale price of other makes.

FIRE POT GUARANTEED FIVE YEARS.

GERMER STOVE COMPANY

Western Branch:
231-247 NEWBERRY AVE.
CHICAGO, ILL.

Main Offices and Foundries:
Erie, Pa.

ARE YOU INSURED?

Are you carrying any "business insurance"? Are you selling a furnace or boiler on which you can confidently expect future business? In other words—are you looking ahead? With no other line of furnaces or boilers, are the agents' prospects so brilliant, as with the Mueller Furnace or the Mueller Boiler. Mueller Furnaces and Boilers were designed to make friends and sell strictly on their merits. Thus the Mueller Agent has a bright future before him; for they will behave as well in the future as they have in the past. And their past record is certainly an enviable one.

Ask us for the Mueller literature.

Our prices on Wall and Floor Registers are very attractive.

L. J. MUELLER FURNACE CO.

191 Reed Street ESTABLISHED 1857 MILWAUKEE, WIS.

BEST HEAVY CANNON STOVE MADE.

WRITE FOR PARTICULARS.

STAR SHOVEL & RANGE CO., Vincennes, Ind.

Energy is Strength
Energy is Hope
Energy is Life

Put it in Your Advertising

Persistency is Might
Persistency is Progress
Persistency is Success

Add it to Your Advertising

Richardson & Boynton Co's.

"PERFECT"
Trade Mark.

FURNACES

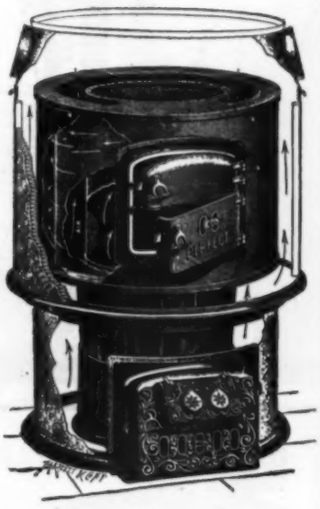
Soft Coal

Adapted for all fuels.

Portable — Brick-set.

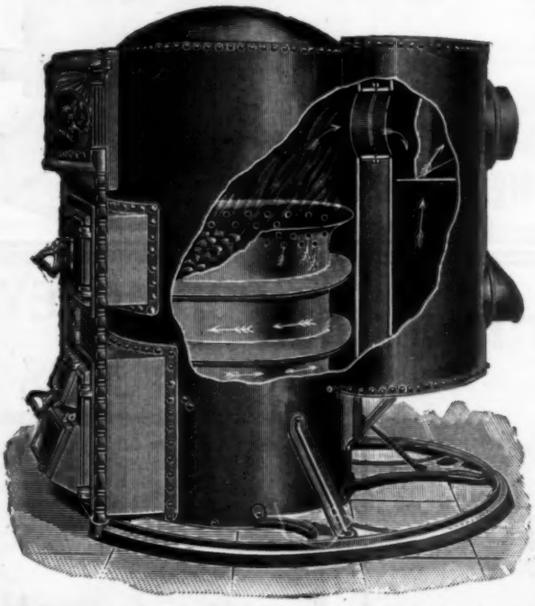
First class in every particular.

Large variety to select from—suitable for any market.



Hard Coal and Wood

234 Water St., NEW YORK **84 Lake St., CHICAGO, ILL.**



SAY!!.

Do you know there is money handling the all steel

WEIR

Gas and Soot Consuming *Furnace?* Let us tell you about it.

Made by The

MEYER FURNACE CO., Peoria, Ill.

HANDY

Furnace pipe is the safest made, easiest to put up and cheapest made.

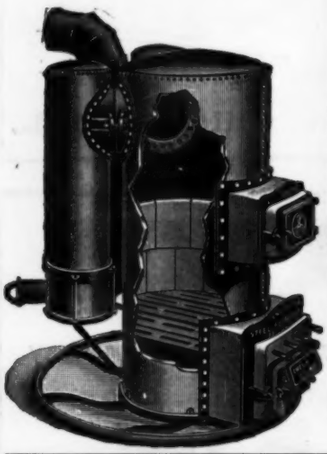
F. MEYER & BRO. CO., Peoria, Ill.

STORM KING FURNACES

One ton of coal in a Storm King does the work of two tons in an ordinary furnace.

Made by
THE ROBERTS HEATING AND VENTILATING COMPANY
213 THIRD STREET S., MINNEAPOLIS.

CATALOGUES & DISCOUNTS GLADLY FURNISHED ON APPLICATION.



"VERTICAL LINES"
That's the kind used in the

FRONT RANK

Hot Air Furnaces. Their use brings the air in direct contact with entire heating surface.

The Front Rank Fire Chamber is one solid sheet of closely riveted steel; being lined above the fire lines with genuine fire clay tiling, it is the most durable made.

The radiators are very large and have an unusual area of heating surface in comparison with size of the fire pot.

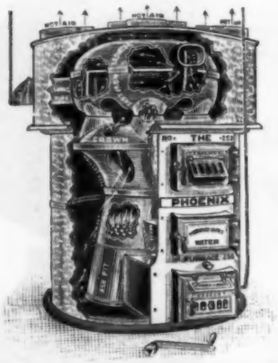
These furnaces burn hard or soft coal or coke. We also make wood burning furnaces.

Send for our catalogue; it will give you a better idea of what we make.

Haynes-Langenberg Mfg. Co.
2301 to 2309 Lucas Ave., St. Louis, Mo.

The Phoenix Furnace

has kept the small householder comfortable on 3½ to 5 tons of coal.



This is for 6 and 10-room houses. Write us for positive proof, and for our system of assisting agents.

Mr. T. Clyne, of Utica, N. Y., heated 11 rooms with 4 tons of coal.

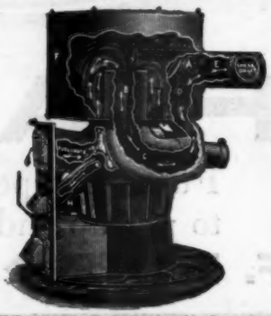
Mr. J. Jones, of Sauquoit, N. Y., heated his entire house 29x32 feet on 3 tons of coal.

PHOENIX IRON WORKS, Utica, N. Y.

GOOD MONEY FOR GOOD JOBS

Is the best basis for establishing trade. We help get it. Ask us how

Canton Perfect Blast Heaters



THE BONNOT COMPANY, Canton, O.

THE IMPROVED HERO
For Hard or Soft Coal—Made in Six Sizes

THE HERO FURNACE

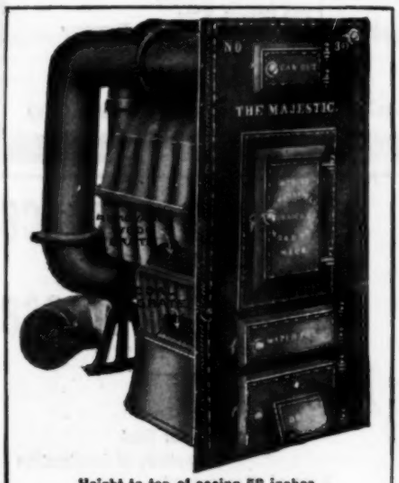
Is the Best for a Cold Climate

The best way to beat competition is to sell a better article than the other fellow does.

Manufactured by

CHAS. SMITH COMPANY
101 LAKE STREET, CHICAGO

Our Prices are Right **Send for Catalogue**



Height to top of casing 58 inches.

The MAJESTIC

All Cast Combination Furnace

PORTABLE OR BRICK SET.

The combination feature of this Furnace is the Horizontal fire box for burning 24 in. wood which acts as a combustion chamber, for burning hard or soft coal, when wood grates are removed.

Note the horizontal and down draft Radiators making a fire travel of 22 feet. ∴

Write for further description and price.

The Chappell Furnace Co.
MORENCI MICHIGAN

Hart & Crouse Co.

UTICA, N. Y.

Royal Heaters

235 Water St., New York. **79 Lake St., Chicago.**

Steam, Hot Water, Hot Air Furnaces, Radiators.

Cable Address—Vainica.
Codes—A B C, 4th Edition
and Western Union

Carr & Co.

EXPORTERS
OF

Agricultural Implements Wagons, Carts

Grindstones, Etc.

CORRESPONDENCE SOLICITED

NEW YORK CITY

We Make It!

The BEST Air Drying Iron Enamel Made.

Try a 1-Dozen Case From Your Jobber.

Nickel Plate Stove Polish Co.,
CHICAGO.

Large 10 oz. Can.

MONCRIEF

WARM AIR FURNACE.

Specialties
- All Cast Iron.
- Monorief Duplex Grate.
- Large Radiating Surface.
- Double Fire Pot.
- Large Grate Surface.
- Top Return Flue.
- Simplicity, Durability, Economy.
- Cleanliness in Use.

HENRY & SCHEIBLE CO.

Sales Agent—J. C. KIMMEL, 3314 East 15th St., Kansas City, Mo.

6-8-10 Long St. Cleveland, O.

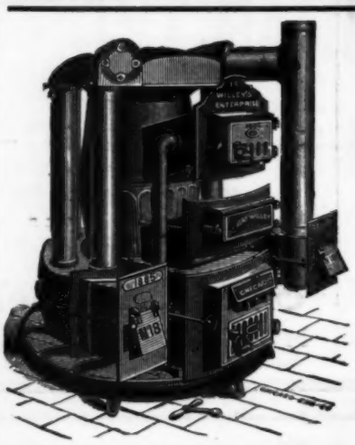
A Saving of Over 25%

guaranteed to ELECTRO PLATERS by the use of our

High Grade Caustic Potash

More Speed, Cleaner Work and Greater Economy.

Manufactured by
ROBERTS CHEMICAL COMPANY
NIAGARA FALLS, N. Y.



Enterprise Furnaces
(ALL CAST)

Garden City Furnaces
(STEEL DOME)

POINTS—Pure Air
Freedom from Gas
Economy of Fuel
Simplicity of Construction
Ease of Management
Great Heating Capacity
Durability

C. W. SHUMWAY & SONS, Batavia, Ill.
Chicago Agents, EVANS & EICHNER, 85 E. Lake St.

FLATIRON FURNACE

with it's Self-Cleaning, Marvelous Power, Large Radiating Surface, Gas and Smoke-Tight Joints, Long Smoke Travel, is the

FUTURE FURNACE

THE MISKIMEN FURNACE CO. LOGANSPORT, INDIANA.

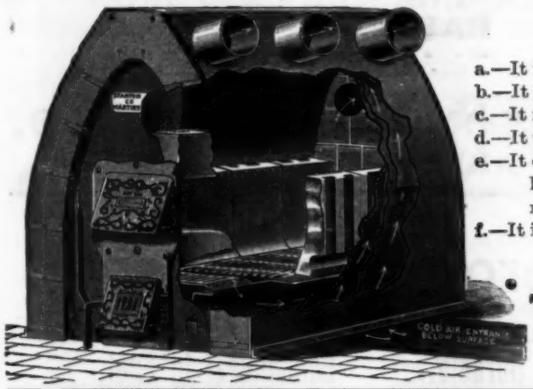
GILT EDGE HARD COAL FURNACE

has an enviable reputation which it has earned just as men earn reputations by doing their work faithfully and conscientiously and better than the other fellow. It is more economical, more durable and more easily operated than other furnaces.

SEND FOR CATALOGUE.

R. J. SCHWAB & SONS CO., MILWAUKEE, WIS.

The Stanton Seamless Warm Air Furnace



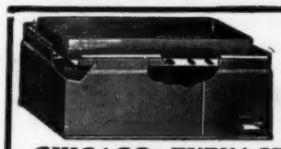
IS THE BEST BECAUSE

a.—It is *Seamless* and cannot leak gas, smoke and dust.
b.—It burns soft coal slack perfectly.
c.—It requires less attention.
d.—It will hold fire longer and keep house at even temperature.
e.—It costs less for repairs, and will last longer. We have many which have been in use for ten years and have never cost anything for repairs.
f.—It is easy to sell, being different from anything on the market.

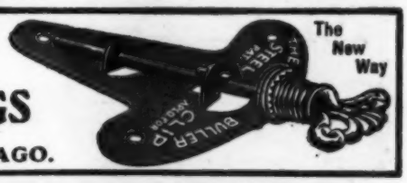
WRITE FOR CATALOGUE.

THE STANTON HEATER COMPANY

MARTIN'S FERRY, OHIO



FURNACES, PIPE, ELBOWS AND FITTINGS



CHICAGO FURNACE SUPPLY COMPANY, - - - CHICAGO.

A Furnace Recipe.

One Part, Good Material.
One Part, Good Design.
One Part, Good Workmanship.

This is the one we use in making the

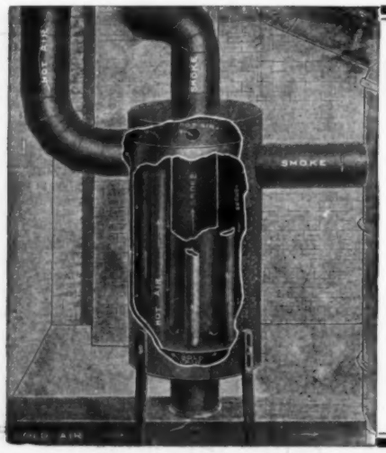
AMERICAN FURNACE

Every furnace we make is guaranteed and our furnaces will bear comparison with any made. It is clean, durable and economical. A boiler-plate furnace, hence it don't crack.

The American Furnace Co.

Large Radiators, Easy to Clean Out. 1911-13 Pine Street, - ST. LOUIS. MO. Burn Hard or Soft Coal or Coke. Large Doors.

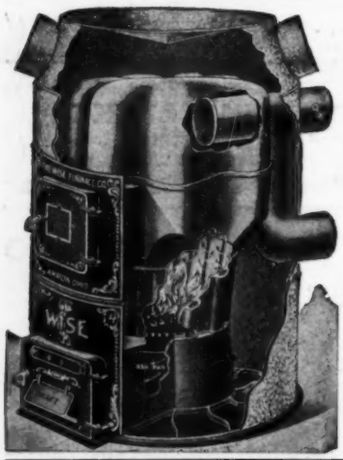
Write for prices and secure the agency before the other fellow gets it.



Something New---But Not Untried

That will increase the heating capacity of furnaces or boilers at least 25%, or save one-quarter of the fuel. Everyone who has a house to heat should have one. Send for particulars, and apply for agency in your city or town quickly. We also manufacture several styles of **New Era Radiators** for stove pipes.

WILMOT CASTLE CO., 77 Elm St., Rochester, N. Y.



The Wise Furnace

is the Culmination of

PROGRESSIVE ENTERPRISE

CELLULAR FIREPOT;
SELF-CLEANING, ALL CAST IRON RADIATOR

SEND FOR CATALOGUE AND TERMS

The Wise Furnace Co.

AKRON, OHIO

Emperor Furnaces

FOR WOOD.

Simple, Safe, Durable. Economical in Fuel.

The Best and Cheapest Line of Wood Furnaces . . .
Furnished for either Brick or Galvanized Iron Casing.

SEND FOR CATALOGUE.

Bergstrom Bros. Co.

NEENAH, WIS.

JAHANT

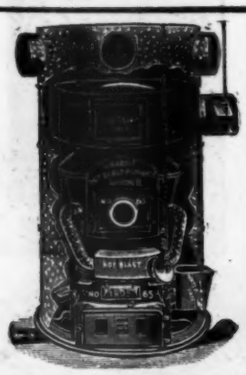
HOT BLAST FURNACES

Simple, Durable, Economical.

Adapted for all classes of buildings.

Made with Cast and Steel Radiators.

Ask for our catalogue.



ROHRBACHER & ALLEN, Akron, Ohio.

RADIUM STEEL RANGES

Three Distinct Styles and Three Sizes of Each Style

The Interchangeable Features on these Ranges enable the dealer to supply the wants of his customers, though he may carry but a limited stock.

Extended Fire Box to take in 25-inch wood.

The Broiler is an exclusive feature.

Large Pouch Feed on the Standard Range.

Air-tight Screw Draft Regulator.

Removable End Shelf on all Square Top Ranges.

All Ranges can be set upon ornamental cast base.

In every respect this line will be found to be the most improved, complete, up-to-date, convenient and most profitable for dealers to handle.

The Auer Register & Manufacturing Co.
Toledo, Ohio

Our Competitors say we are out of business!

They wish we were as we are making it pretty warm for the trust.

$23.50

BODY—Made of heavy polished blue steel plates, securely riveted and braced.

FIREPOT—Oval, linings extra heavy, fire box constructed to burn all gases, duplex grate, adapted for all fuels.

OVEN—Ventilated, very roomy, will bake more quickly and with less fuel than any other range on the market. Our oven is a strong feature.

RESERVOIR is guaranteed rust-proof.

If the name **GOLD COIN** appears on your range, it is absolutely perfect and fully guaranteed.

$23.50, Cash to accompany order.

WRITE FOR PRICES ON RANGES, BASE BURNERS AND OAK STOVES.

CHICAGO STOVE WORKS

STOVE MAKERS TO THE TRADE — **Blue Island Ave. and 22nd St., CHICAGO**

FOSTER'S PEERLESS

It's The Latest and Best.

Our aim in designing this steel cook was to combine the best features of all other cooks with exclusive features of our own—to bring together the most careful workmanship, the highest grade materials, the most ingenious, comfort-infusing devices—to produce the best cook on the market. We have succeeded.

A CATALOG MEANS MONEY

THE FOSTER STOVE COMPANY, IRONTON, OHIO.

H. C. HOBBS, Pontiac, Illinois, Writes:

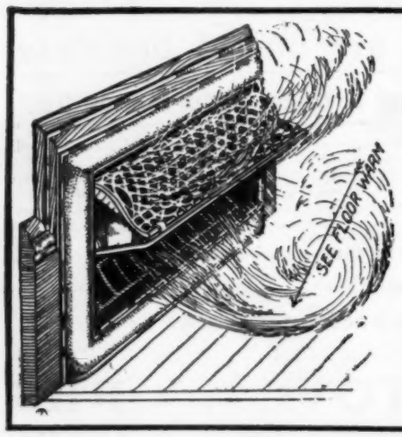
"Please take out 'ad.' in 'Want' Column for tinner. Your first issue found me a good man."

Floral City Hot Water Boilers, Steam Boilers

are leaders. We have a full line of round and sectional water and steam boilers.

Write us for catalogue.

Monroe Foundry & Furnace Co., MONROE, MICH.



WARMTH ON THE FLOOR

The only Floor Warm Register manufactured.

C. H. FOSTER
3403 Bell Ave., St. Louis, Mo.

MAKER LARGEST LINE OF WALL REGISTERS

Are You Going to Get on the Band Wagon?

We *doubled* our register sales last year and from the present outlook will *triple* them this year.

W H Y ?

Because we make good Goods

SEND FOR CATALOGUE

Stowell Mfg. & Fdry. Company
SOUTH MILWAUKEE, WIS.

Drop a postal in the slot.

It will bring our man who will tell you all about our selling plans. They are good, practical business plans. They mean more business, at better prices for you, and more furnace sales for us. They mean that, and the "Thatcher" means more. Where there is a "Thatcher" there is a comfortable, economically heated home. The man who has that kind of a home is sure to tell his friends about it. Don't you think some of his friends will want the same thing? Now, before you forget, is the time to drop that postal.

NOTE:—We do not sell to consumer, either directly or indirectly, but sell through the trade only.

Thatcher Furnace Co.
240 Water St., New York.
Works: Newark, N. J.

The "Symonds"

FURNACES AND FURNACE SUPPLIES

TO OPEN, PUSH INWARD AT TOP.

The "Symonds"

STOCKHOFF SUPPLY CO.
ST. LOUIS, MO.

Richardson & Boynton
"PERFECT" FURNACE

"STOCKHOFF"
STEEL PLATE FURNACE

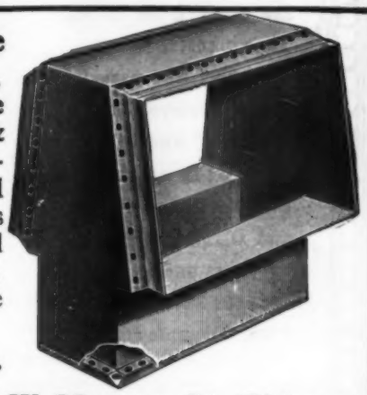
"BOSTWICK" Metal Lath

Scott's Extra Coated and
N. & C. Taylor's Old Style

ROOFING TIN

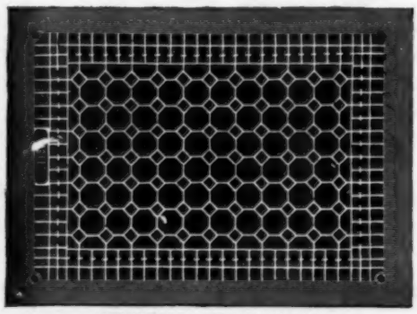
We Make a Complete Line of Boots, Stack Heads and Fittings, both Double and Single, for Tuttle & Bailey, Ferrosteel and Hart & Cooley Special Side Wall Registers, and will be glad to mail printed matter and quote prices thereon, as well as on Hard and Soft Coal Furnaces, Furnace Pipe, Registers, Nested Stove Pipe, Stove Pipe Elbows and Furnace Supplies.

Our Goods and Prices are Right.



THE EXCELSIOR STEEL FURNACE CO., 38 W. Monroe St., Chicago

"REGISTERS OF QUALITY"



MOORISH FLOOR REGISTER.

THE FERROSTEEL COMPANY,

CLEVELAND, OHIO
Offer two lines for 1904.

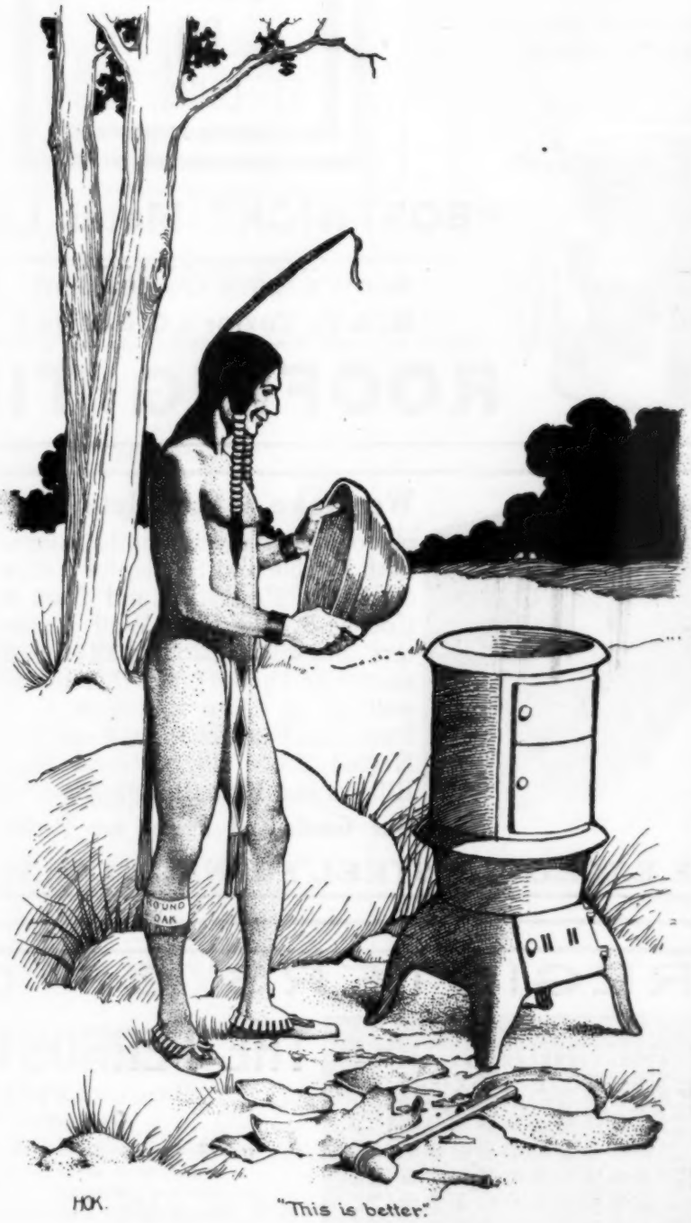
1. *The time tried and reliable line of Ferrosteel goods noted for accurate mechanism and perfect finish.*
2. *Our new Modified Steel Register combining an absolutely rigid top with an invulnerable bottom.*

Genuine Moorish or Plain Lattice Tops furnished with either line. All our goods are labeled. None others are genuine. Catalogues, prices and Special Circular illustrating our SIDE WALL REGISTERS on application.

ROUND OAK

Standard of America

As the time
for heating stoves
will soon be with us
again, we wish
to remind our customers
that the famous
Round Oak Heating Stove
still takes soft coal
in at the side door,
also wood, hard coal
in the top for magazine,
or side, as you prefer.
That it holds the fire
all night—all day, too,
if the folks
are away from home.
That it costs, in
this sheet-iron period,
but little more than
"others," and will excel
them all in operation in
every spot and place,
and OUTLAST them
by years and years.
It is the stove to "push."
"See the name on the leg."



ESTATE OF

P. D. BECKWITH

FRED E. LEE, Manager

Dowagiac Mich.

MAKERS OF GOOD GOODS ONLY

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES, THEIR POSSESSIONS, AND CANADA, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES EXCEPT CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, communications and remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
69 DEARBORN STREET, CHICAGO, ILL.

Entered at the Chicago Post Office as Second Class Matter.
THIS PAPER IS A MEMBER OF THE CHICAGO TRADE PRESS ASSOCIATION.

CHICAGO, JULY 30, 1904.

THE German navy have been making some very interesting experiments to test the depth of the sea on the speed of ships. Torpedo boats were used, it being found that at speeds not exceeding twelve knots the depth of the sea did not exercise any influence. When steaming at 15 to 21 knots, it was observed that shallow water acted as a serious check.

THERE have been a large number of schemes of late to assist people in saving. The latest is a penny-in-the-slot savings bank, which is quite a success. These machines are located at railway stations and other public resorts, and the individual desirous of obtaining a bank account drops a penny in the slot and receives a ticket which is accepted for the money at the headquarters of the scheme.

THE report of the National Association of Car Service Managers for the first quarter of 1904 shows that the average detention of cars the country over is 1.67 days. Of this the railroads are charged with an average detention of .36 of a day, while the consignees are charged with 1.32 days. According to the complaints which I have personally heard from a large number of hardware dealers as to the number of days in which the railroads have detained cars due to them, the aforesaid common carriers must have been miraculously prompted in a large number of cases in order to keep up to the average mentioned.

AMERICAN INDUSTRIES recently took up the question of the adoption of the metric system and published a list of firms who gave their reasons for the compulsory adoption of the metric system. This list included manufacturers of files, portable tools, water meters, electrical appliances, house heating boilers, jewelry, stoves, bridges, railways, headlights, wagons, coffins, leather belting, leather, whisky, hosiery, bags, paper, blank books and corks. A correspondent of that paper ridicules the value of this list, saying that the manufacturers mentioned do little measuring. We think this criticism is entirely captious in the matter of stove and boiler manufacturers, as well as in a number of other lines.

UNITED STATES CONSUL JOHN C. COVERT at Lyons reports that coal briquettes are in very general use in France, hardly a household being without them during cold weather. They are more easily handled and more readily ignited, and they throw out more heat than coal and make no dirt at all. They are preferred to any kind of coal. The inspector-general of the Paris, Lyons & Mediterranean Railroad Co. in Lyons says that his road uses large quantities of coal briquettes, about 10 per cent of its fuel consisting of them. Thus the road is enabled to utilize all the slack and coal dust from the mines. The engineers can get up steam more quickly with briquettes than with any kind of coal without them. They form no slag or clinkers, and tend to prevent the formation of clinkers when used with other coal. The company manufactures its own briquettes. About 65 per cent of its fuel consists of fine coal or slack.

A BET is a little thing. The man who makes it is sure it can do him no harm. Other men may ruin themselves by gambling or speculation, but not he.

Fortunately society is able to find a better point of view for passing judgment than that of the individual man seeking for amusement, excitement or easy money. It has at hand the convincing method of statistics. It can estimate the extent of the gambling evil by percentages.

Two guarantee companies—the Guarantee Company of North America and the United States Guarantee Company—have just been applying this method, and they have decided that they cannot afford to issue bonds for any employe who is given to gambling or speculating. They have announced that they will cancel the bonds of any patron whenever they have proof that he has the gambling habit. That will mean in the majority of cases that the amateur gambler must quit his amusement or quit his job.

Such action is taken by these companies entirely as a matter of business, but it will possess a valuable social effect. It will help to meet what is coming to be a national need—namely, the placing of some effective check upon the growing craze for "getting something for nothing," which manifests itself all the way from Wall street to the penny policy shop. The ravages of this craze, or, perhaps better, disease, are sometimes startlingly evident, as, for instance, in the "Patsy" King trial the other day, when whole panels of jurors confessed, man after man, that they "believed in policy" and were not in sympathy with the laws framed to suppress it.

Italy and Spain give us excellent examples of countries in which the gambling spirit has supplanted the spirit of business enterprise. America has grown rich by its business enterprise. It cannot afford to let

its people impoverish the country by turning themselves into habitual gamblers.

The laws against professional gaming establishments must be enforced and the craze of the dupes must be discouraged by every available means.

THE foreign commerce of the United States in the fiscal year 1904 is the largest in its history; the exports of manufactures are larger than in any preceding year, and the exports of domestic products exceed those of any other country.

The total exports during the year ending June 30, 1904, are $1,460,829,539, against $1,420,141,679 in the fiscal year 1903, an increase of $40,687,860; that the imports for the year are $990,745,084, against $1,025,719,237 in 1903, a decrease of $34,974,153; and that the excess of exports over imports is $470,084,455, against $394,422,442 in 1903, an increase of $75,662,013 in the excess of exports over imports.

Comparing the figures of 1904 with those of earlier years, it may be said that the total exports are larger than in any preceding year except 1901, that the imports are greater than in any preceding year except 1903; and that the total commerce—the imports and exports combined—in 1904 is greater than that of any preceding year. The total commerce of the year amounts to $2,451,574,623, against $2,445,860,916 in 1903, and $2,310,937,156 in 1901, the years in which imports and exports, respectively, made higher records than those of 1904. Thus, while neither imports nor exports for 1904 reach the high record of a single earlier year the total of imports and exports combined in 1904 exceeds the total commerce of any earlier year.

In manufacture the exports of the year will make their highest record. While the figures of manufactures exported for the full fiscal year 1904 have not yet been completed, the fact that the eleven months' figures already completed exceed by 17 million dollars those of the corresponding period of the record year, 1900, makes it apparent that the total exports of manufactures in 1904 will be greater than those of any preceding year.

It is also apparent that the exports of domestic products from the United States in the fiscal year just ended will exceed those of any other country. The United Kingdom is, next to the United States, the world's largest exporter of domestic products, and until within recent years surpassed the United States in its total. During recent years, however, the United States has rapidly gained upon and finally overtaken the United Kingdom in the race for supremacy as an exporter of domestic products.

In 1900 exports of domestic products from the United States exceeded those from the United Kingdom by about 35 million dollars. In the year ending June 30, 1902, those of the United States exceeded those of the United Kingdom by about 8 million dollars. In the fiscal year 1903 the United Kingdom was again at the front, her total of domestic exports exceeding that of the United States by 22 million dollars. In the fiscal year 1904 the United States will apparently be again in the lead, since figures of eleven months already in hand show for that period an excess of 38 million dollars in favor of the United States.

RANDOM SKETCHES.

BY SIDNEY ARNOLD.

Curbing the naughty catalogue houses, forcing the parcels post to enact the role of Rip Van Winkle, the elimination of the maximum risk in credits both wholesale and retail—these are a few of the strenuous questions that loom up in the hardware world. Strenuous questions require earnest consideration and unswerving persistence, repeated conferences and energetic correspondence, and other equally strenuous methods in order that satisfactory solutions may be found.

There are Liliputians as well as Brobdignagians in the realms of trade abuses and whereas some of the weightier evils require a long course of phials and physicians before a cure can be completed, a little surgery will cure the little commercial sores in a day or two at most.

F. D. Mitchell, the energetic secretary of the American Hardware Manufacturers' Association, who has been instrumental in securing many new members for that body and whose personality is a large factor in the success of the association, is about to lance an itchy, irritating hardware pustule, for which he will receive the hearty thank-yous of the trade. Mr. Mitchell, in a recent favor, outlines the evil in question as follows:

"One matter which has been 'brought to our attention' from several quarters is the pernicious habit on the part of many express companies of 'collecting at both ends,' which at first glance appears to be inconsequential because a majority of manufacturers install a system for following up the matter; but, contemplating shipments (prepaid) of samples, advertising ('souvenirs' and otherwise), 'Christmas presents' and what not, and multitudinous other express shipments on which the recipient would never raise the question of 'collect'; that to collect the rebate of '25c' from the express companies about that amount must be spent in employes' time, stenographer or printed forms to cover express company's mistakes."

It must be borne in mind that "drivers" of express companies whose fingers itch have marvelous scent for the contents of a parcel. They know in many cases whether it is a regular order and hence immune or whether it is a special such as referred to by Mr. Mitchell, and hence offers an exceptional opportunity for petty loot.

This laudable ambition of the express companies or their employes to secure a quarter when they see one around loose is gratified at the financial expense of the consignee and the reputation for liberality of the consignor. The former puts up and does not look a gift horse in the mouth, but at the same time remarks to his partner that the Tizit Hardware Mfg. Co. are close fisted brethren. He is apt to add with some self-laudatory unction that he is glad that his firm are no cheap skates.

Some other recipients of souvenirs keep mum, but whenever the name of the consignors comes up they remember them as a firm just a trifle tarnished—not necessarily shady or discredited but not all wool and a yard wide, royal goods, royal good fellows, etc.

I am glad this matter has been taken up. While it makes for but little financially it makes for much in the line of commercial courtesy and for much in the line of commercial honesty.

* * *

TING-A-LING! Ting-a-ling! The telephone which enables the dealer to talk at his pleasure with a man 5, 50 or 500 miles away is emblematic of the closer affiliation of commercial interests. It is the little brother of the new commercial fraternity—the drop a nickel in the slot secretary of every local hardware association in existence—the crucial spike in the platform of commercial solidity.

What's your telephone to you? Is it merely a convenience for the drummer who visits your town in finding out if John Jones, the hardware man, in the next town is at home?

Is it a detriment to your business, being used principally as a vehicle for the sentimental gossip of your clerk?

Are you one of the few men who use it as a business getter?

In your local advertising in local newspapers and in circulars do you emphasize the fact that telephone orders receive your prompt attention?

When you are offering a hardware bargain do you ever call up a few customers and tell them about it?

When you hear that Tom Higbee was thrown from his buggy, do you call up his house and ask how he is?

When Foxy Grandpa Hunks comes into your store and prices a steel range that cost you $35 and you say $50 and Grandpa says, "Buller over at Swisherville will sell me the same range for $40," what do you do?

Perhaps you write a letter to the Whirligig Steel Range Mfg. Co., as follows:

"Why in thunder is not my money just as good as Buller of Swishersville? He is selling your Whirligig steel range at $40. You are charging me $35 for it and I cannot meet such competition. Now, I am working up a good trade on this range and getting $50 for it, but if you cannot sell to me as cheap as you do to Buller, I won't buy any more."

Perhaps you tell Foxy Grandpa what you think of Buller, probably interspersed with a few delicate reflections on his ancestry and sell the range for $40 just to beat Buller.

Perhaps if you are a real wise guy you cogitate. If you do this you will remember who Foxy Grandpa Hunks is and how nothing gives him so much joy in life as beating down a dealer.

If you do this you will also remember meeting Buller at the hardware convention last February and that he was a real decent fellow and that his wife who accompanied him took quite a shine to your little boy whom you took along to see the sights.

If you think of these things you will TELEPHONE.

YOURSELF: "Good morning. How are you, Buller? I spanked my kid the other day and he said he was going over to live with Mrs. Buller at Swisherville because she treated him so well at the convention. By the way, Joseph Hunks, who lives on the Lebanon Pike, is in and he tells me you offered him a No. 8-18 Whirligig with reservoir and high closet for $40. The Whirligig people won't do a thing to you when they hear about it."

BULLER speaks.

YOURSELF: "That's too bad, Buller; there must be a mistake somewhere. Will you hold the line just a moment while I call Mr. Hunks to the 'phone."

FOXY GRANDPA HUNKS: "I am sorry, but I can't hear well over the 'phone."

Once again—are you getting all the good out of your telephone you can?

* * *

ARE you one of those hardware dealers located, let us say, in a city of 25,000 people who thinks everybody knows you?

Are you the cheerful genius who drives into the country and paints signs on the fences reading, "Buy Steel Ranges of Bloobs?"

Are your advertisements signed, "Bloobs, the Hardware Man"?

Do your emanations in the way of publicity refer only to "Bloobs," without the slightest indication of where you do business or where you may be found?

Many people seem to find it extremely difficult to realize that everybody is not so familiar with their business and their whereabouts as they are themselves.

Their business looms so large before their eyes that they forget that other people have something else to do besides stand around on the other side of the street and admire.

No matter how big you get or how much business you do, it will pay you to assume, in your effort to get your name before the people, that you just commenced this morning and that nobody ever heard of you.

By adopting such a course you will reach not only the people who know you and the people who have barely heard of you, but also the man who has just moved into the neighborhood.

* * *

FROM the Des Moines News of July 4th I learn that "from playing with matches the Vicks Hardware Co. suffered a $3,000 loss from fire." Hardware companies should learn not to play with matches.

* * *

W. M. LAWRENCE of Norwalk, O., is a busy man, as is shown by the following clippings from the Reflector of that city:

"Have just received a consignment of cookers which you will want to see.

"Big stock of hosiery. You know that means the best yarn, the best dye, the best fit and no seams.

"Have several articles of housefurnishings, gasoline stove, gas hot plate, cook stove for wood or coal, bed and bedding, crib, and other items, for sale cheap.

"Fine house and lot in Berlin Heights to sell or exchange for Norwalk property.

"Several first-class investments for your surplus capital. Don't let your money lie idle.

"It will pay you to consult me before taking out an endowment, life, health or accident policy. Don't believe everything you hear, but investigate for yourself.

"Consult me about your pension matters. I may be able to help you to increase your income along this line.

"That's all for this time—most forgot the water bottles and sprayers."

Some people find it hard work to sell stoves alone but this gentleman evidently is able to handle hosiery, houses and lots, invest money, sell life insurance, act as a pension attorney and sell water bottles on the side.

News Siftings

The Dallas City Stove Co. are a new Carthage, Ill., stove concern.

The B. C. Bibb Stove Co., Baltimore, Md., expect to be located in their new building by September 1st.

H. C. Shattuck, A. R. Morgan and J. W. White are are incorporators of the Interstate Steel Co., Rockford, Ill., capitalized at $65,000.

Monroe C. Smith, H. W. Smith and F. E. Wade are the incorporators of the Shaker Steel Co., Elbridge, N. Y., capitalized at $100,000.

Lewis M. Hires, Chas. H. Muckenburn and Thos. G. Hillard are the incorporators of the Nature Co., Salem, N. J., capitalized at $100,000, for the manufacture of copper, brass, iron, steel, etc.

Jacob Hauser, John Reeves, John Ohnsman, J. M. May, John T. Reeves and H. W. Reeves are the incorporators of the National Scale Co., Beaver Falls, Pa., capitalized at $125,000, for the manufacture of scales of all kinds.

P. Billmeyer, H. Reeve Brayton, Harold S. Fairchild, Rougier Thorne and Victor H. Rettichare are the incorporators of the Knickerbocker Light & Heat Co., New York City, capitalized at $550,000, for the manufacture of gas heaters, burners and ranges.

Frank A. Tathbun, Bartholomew D. Brooks, W. A. Wildeback, Chas. W. Meikel and Wm. W. Spencer are the directors of the re-incorporated Tathbun-Brooks Mfg. Co., Indianapolis, Ind., capitalized at $10,000, for the manufacture of light metal novelties.

The American Stove & Range So., Keokuk, Ia., send us a little circular calling attention to their American steel ranges, American steel cooks, American cast cooks, American Hot Blasts and American Oaks, which are an entire new line of medium-priced goods sold with full guarantee.

Smith & Anthony Co., 48-54 Union street, Boston, Mass., are sending a letter to the trade calling attention to the fact that the Hub line of ranges and heaters is made in ten different grades, and in great variety of sizes and styles. In addition to the regular styles of ranges, the Hub is equipped with a variety of styles of gas attachments, including the gas end shelf, full gas attachment at end of range and gas elevated ovens and broilers.

Veryl Preston, president of the Eastern Steel Co., Pottsville, Pa., estimates the producing capacity of the steel manufacturing plant now being built at that point at 120,000 tons per year. If two more open-hearth furnaces are added to the four now installed the capacity will be increased to 180,000 tons. The bridge works, an auxiliary to the plant, he estimates will make about 25,000 tons per year. About $1,500,000 will be spent to finish the plant.

The Raymond Mfg. Co., Middletown, Pa., send us their latest catalogue showing a varied line of stoves and ranges including the Home Perfect, Thermo Perfect, Model Perfect, Grand Perfect, Art Perfect, Victor Perfect, Art Capital and New Capital cast ranges, Ideal Perfect ranges, Grand Susquehanna and New Susquehanna cooks, Perfect airtights, Perfect Oaks, Perfect Hot Blasts, etc. One of the catalogues will be forwarded the trade on application. When writing for same kindly add: "Saw it in THE AMERICAN ARTISAN."

The A. C. Barler Mfg. Co., 104-106 Lake street, Chicago, have devised a colossal poster, lithographed in seven different colors and printed with metal strips at the top and bottom to secure greater durability. The central design shows two youngsters who have just taken their bath and are warming up before the Barler Ideal oil heater. They are evidently enjoying its genial warmth while waiting for their nurse to come along and dress them. The top of the poster has the inscription in large red letters, "Barler's Ideal Oil Heater."

The Smith & Anthony Co., 48-54 Union street, Boston, Mass, send us a large circular calling attention to a variety of Hub goods, including the Crown Hub square parlor stove with full indirect draft, for coal; the Superb Hub parlor with indirect draft, for coal; the Art Hub parlor, for coal; the Ivy Hub parlor with direct draft, for coal; the Hub Oak parlor with direct draft, for coal or wood; the Hub, Jr., Oak, for coal or wood; the Hub, Jr., Oak with half indirect draft for coal or wood; the B. & M. air tight, for wood; the Hub Star parlor, for wood; the Monarch Hub range, with hot closet base, and No. 8 high shelf; the Model Hub "C" range with cabinet base and No. 8 high shelf; the Famous Hub range, with cabinet base and No. 09 high shelf; the Magic Hub range, with cabinet base and No. 06 high shelf, the Star Hub range, with cabinet base and No. 3 high shelf, and the Beauty Hub range, with cabinet base and No. 5 high shelf. These circulars will be forwarded to the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

The Radium Stove Co., Columbus, O., send us a catalogue, calling attention to their Radium base heaters. The Radium gas fuel stove is built on the same principle as a hard coal base burner, and heats the floor first. It is gas and air tight, unique in style, made in beautiful designs and with fine castings and mountings. The three base skirts, the three foot rails, the two side tee plates and the large name plate panel all hook to lugs in a quick and novel manner. The mica illumination of the front door and two end frames is very large. The entire fire chamber is made of heavy cast iron. The burners used are of the Bunsen pattern, and produce a pure blue and green flame. The cast pipe collar is reversible, and either turns up or out. The mixers are adjustable. The wooden handle lever cocks have adjustable gas orifice and lock nut attachment. The cold air starts into the large central drum, traveling upward through the porous fuel into the front compartment of the air tight top. The course is then down the front corner tubes into the air tight base, after circulating which, it travels up the back corner tubes into the rear compartment of the top and passes, together with the products of combustion into the flue.

One of these catalogues will be forwarded the trade on application. When writing for same, kindly add, "Saw it in THE AMERICAN ARTISAN."

BARLER'S IDEAL OIL HEATER.

The accompanying illustration shows Barler's Ideal oil heater, manufactured by the A. C. Barler Mfg. Co., 104-106 Lake street, Chicago.

Barler's Ideal Oil Heater.

In this heater a set screw prevents the wick from being turned too high.

This set screw is adjusted in the start and then the wick is operated by the ratchet button. All Ideal burners are made of brass. All Ideal oil founts are brass. These oil founts are removable, have bails for carrying, have indicators to show oil supply, and are fitted with extra large filler caps. The wick tubes are seamless brass and have patent "drip cups" that prevent the oil from running over.

STEEL RANGE OUTLOOK.

The Mitchell Bros. Co., Cleveland, O., write: "In our city the outlook for steel ranges or, in fact, any stove is not very bright. Natural gas has just entered Cleveland, but has not as yet been piped very thoroughly in our city, so the stove men do not know what to expect and the people do not know what they want. It spoiled our stove business last year and is doing it again this year. We expect no increase in the steel range business here this year. In our section steel ranges are not supplanting cast ranges. The fact is, cast ranges are again coming into the market supplanting steel ranges.

"Our vicinity requires medium and high-priced steel ranges. We are not bothered by the range peddler in our section of the city, and, consequently, have not thought the matter over as to which would be the best mode of fighting this style of merchant piracy. The margin of profit on steel ranges has grown smaller, the same as on other lines of goods; still we think the margin sufficient. Malleable iron ranges are not heard of in our locality. There is no call for them. We do not carry steel cooks nor is there any demand for them in our locality."

STEEL RANGE OUTLOOK IS BETTER THAN USUAL.

W. A. McIntire & Co., Ottumwa, Ia., write: "The outlook for steel ranges is better than usual. Crop prospects are good and there has been no serious labor trouble; in consequence, we expect to increase our sales on steel ranges this year.

We still think the medium-priced range manufactured by a first-class house the most satisfactory for all concerned.

The range peddler has not troubled us here and would have a hard task with the amount of newspaper advertising done in this city by the stove dealers.

We are satisfied that the average dealer does not get a sufficient margin of profit on steel ranges.

It means a large investment of capital, capable salesmen and skilled labor to successfully handle them. These things cost money and make the real cost of a range much higher than the original invoice shows. This fact should be remembered when pricing a range, as this bill must be added to the cost.

The malleable steel range has never made much headway in this locality.

Steel cooks do not seem to interfere with the sales of ranges, but rather act as a stepping stone to the better goods, viz., the range."

LARGE FIND OF ORE.

A discovery of a large deposit of gray or magnetic ore near Sycamore, Ala., on the Alabama Mineral division of the Louisville & Nashville railroad, has caused considerable gossip, inasmuch as it develops the fact that there is ore in abundance in other places besides on the mountains in the immediate Birmingham district or on Lookout Mountain. The ore runs 46 to 47 per cent metallic iron with other elements about the same as the red ore in the Birmingham district, except that the ore has fluxing element equivalent to 6 per cent of carbonate lime. The test in the furnace shows that the ore is as readily reducible as brown ore. There are probably 10,000,000 tons, if not more, in a six-foot seam which has been tapped. Under this seam there is another seam which contains, it is estimated, 25,000,000 tons of ore. The location of the ore is ideal for the erection of a furnace, having near at hand a bountiful supply of water and an excellent quality of fluxing material. There will probably be extensive development on the property.

LAUREL STOVES AND RANGES.

The Art Stove Co., Detroit, Mich., and 79-83 South Jefferson street, Chicago, send us their handsome 1904 catalogue of Laurel stoves and ranges showing entirely new and original patterns in every line. The illustrations and typography of this book appear in two colors and are unusually attractive.

The Laurel steel ranges include the 20th Century steel Laurel range, Supreme Laurel range and Advance Laurel range. They distribute heat evenly under the oven, it is claimed, through a two-flue system. Another novelty is the interchangeable and quick heating reservoir. The top of the oven is protected with a cast iron grate filled with asbestos. The range bodies are made of two sheets of steel with thick asbestos board between, fastened together with heavy steeple head rivets.

The Laurel cast ranges for coal and wood include the Domestic Laurel, Elegant Laurel and Leader Laurel. These ranges have duplex grate reversible for wood, heavy cast iron linings ventilated, heavy ribbed covers, sectional cover, ventilated ovens and interchangeable reservoirs.

The Art Laurel base burners, 20th Century Laurel

heaters, Hot Blast Laurels, Oak Laurels and Wood Laurels are all singularly attractive in appearance and possess points of exceptional merit. The Art Laurel base burners has a circular flue construction which, it is claimed, throws the heat in direct contact with both the outside and inside walls of the base. One of these catalogues will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

MODEL STOVES.

The Portsmouth Stove and Range Co., Portsmouth, O., send us some circulars showing some of their popular stoves.

The Model hot blast is a new air-tight which is regularly supplied with hot blast tube. Its special features show a large feed door, also a substantial perforated mica protector, a handsome turn key and this firms patent mica holder. Other features are the large high ash pit, with large ash pan, the well-fitted base door with turn key, and patented air-tight register and center grate. The fire pot is extra heavy and the linings are cast. The bodies are made in three sizes of extra heavy refined sheets.

The Model Oak has a draw center grate, gas burning register, check register in pipe collar, anti-buckling drums, nice nickel rings and plates and smoke curtain, round air-tight register in the inside of the ash pit door. These stoves have extensions cast solid on top of fire pots, which it is claimed will not buckle or warp. The sectional ring fits over the flange turned out on the bottom of steel drum, which in its turn fits down on the flange of fire pot, and then ring and fire pot are bolted together with drum flange between them.

The Model radiators for hard and soft coal have a very large heating surface with joints ground and cemented. The fire pot is the same as in the Model Oak, as is also the patented draft register. The mica door in this stove has also a mica protector, a handsome turn key and patented mica holder. The nickel parts are the base, feet, the foot rails, brackets, turn keys, register knobs, the top corners, and the swing top.

One of the circulars will be forwarded to the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

INDEPENDENT GAS HEATERS.

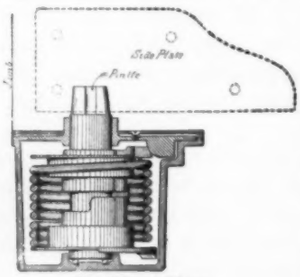
The Independent Register Co., Cleveland, O., send us their 1904 catalogue calling attention to their line of Independent gas heaters. In the Independent natural gas heater No. 153 the series of air tubes take the air from the floor where it is always coldest, pass it directly over the heat generated at the burner, where it becomes intensely hot. It is then discharged through openings in the top of the stove provided for this purpose. Each air tube has 100 inches of radiating surface of the hottest possible kind as they are directly over the fire and as there are eleven tubes in this size, there are 1,100 inches of radiating surface on the tubes alone. This is in addition to the large and effective outside radiating surface. The tubes are made of heavy cold rolled steel, the body of polished steel, the fire box lined with heavy cast iron. The stoves are equipped with powerful double blue flame burners of cast iron, drilled, with sectional basket gates filled with incandescent gas fuel, which when heated shows a cheerful glow through the large mica doors. One of these catalogues will be forwarded the trade on application. When writing for same, kindly add: "Saw it in THE AMERICAN ARTISAN."

MATCHLESS DOUBLE-ACTING FLOOR SPRING HINGE.

The Lawson Mfg. Co., 40 Dearborn street, Chicago, are offering the trade the Matchless double-acting floor spring hinge, shown in the accompanying illustrations. These hinges are designed for use in banks, churches, public buildings, vestibules, butlers' pantries and for outside doors. This hinge can be furnished without the side plates, in which case an invisible shoe or socket is used.

Hinge in Use.

This hinge can also be furnished with a pintle raised for ½ or ⅝ inch threshold. These hinges are correctly set up for doors specified and require no adjusting. Their power is in the strength of springs, and not by putting on tension. These hinges require no adjustment and are quick and easy to apply. The Matchless pivot hinges without springs have ball bearing cups made from the best tool steel, oil tempered. The pintle on which the socket rests is made from steel shafting. Some of the finishes in which the hinge is made are: Japanned, dead black; unpolished, imitation rustless iron; unpolished, bronze plated; unpolished, brass plated; unpolished, brass plated antique; unpolished, dull or old brass; unpolished, antique, copper; genuine rustless iron; polished, bronze plated; polished, brass plated; polished, antique brass; polished, antique brass, sand blast; polished, dull or old brass; polished, antique copper plated; sand finish, antique, copper plated; brass metal, polished; brass metal, antique; brass, antique, sand blast; brass, dull or old, brass finish; bronze metal, polished; bronze metal, polished, antique, copper; bronze metal, sand finish, antique, copper; bronze metal, polished, silver plated to order; bronze metal, dull finish, silver plated to order; brass metal, verde antique; polished, nickel plated, and bronze metal, nickel plated.



Sectional View.

Catalogue House Competition.

We take pleasure in presenting herewith an additional batch of interesting letters we have received from various branches of the trade, commenting on the question of catalogue house competition. The different angles of vision show that there is need of greater unison in the ranks of legitimate merchandising—a consummation that is felicitously nearer with each succeeding month.

Hamp Williams, Hot Springs, Ark., president of the Arkansas Retail Hardware Dealers' Association, writes:

THE DIN OF BATTLE.

In my judgment the catalogue houses have declared war on the legitimate retail dealers and are pouring shot and shell into us on every side. They have, already, sentinels stationed at every point where there is business. These sentinels and carriers are paid by Uncle Sam. The catalogues are their munition of war and are at work seven days in the week, beginning on Sunday morning and working continuously until the following Saturday night. Every day and night, three hundred and sixty-five days in the year, day in and day out, year in and year out, working all the time, while the retail merchant goes to his store at 8 o'clock, looks over his mail, and watches around to see how his business is going, and hears his clerks tell of a few sales they had lost from catalogue competition. He goes to dinner at twelve o'clock, back at one or one-thirty, sends to the bank, looks up a few delinquents, rounds up the collector, and tells his salesmen to keep their eyes on the gun; goes home at five or six o'clock, having worked about eight hours, the number of hours required by most all labor organizations; while our competitors, the cataloguers, put in sixteen hours or more, every minute of which is used in one direction, advertising good goods and cheap goods; the very thing to induce people to trade with them—while the retail merchant as a rule only gives about one-sixteenth per cent of his time to trade getting.

SILENT WORKERS.

The laborer says to his co-laborer, "I only work eight hours per day and you shall not work any more than eight hours"; but the retail merchant can't say that to the catalogues. They are silent workers and never give offense. They never contribute to your poor and distressed; neither do they refuse to do so. They never help build your churches and school houses; neither do they refuse to do so. They never extend any credit to you in time of need; neither do they refuse you. They never resent an insult; they are always pleasing and inviting. They never get sick and employ local physicians; they are always well and smiling. They do not eat, wear clothes, pay rent, nor taxes; while we, the retail merchants, poor devils, have to meet our customers face to face in every transaction.

Now that such a battle is on, what is the remedy? I have read several letters from the most prominent jobbers, retail merchants and manufacturers in the country, and they each write good letters and offer good suggestions as to remedy, and if followed out, no doubt will do much toward relieving the situation.

SHOULD STAND TOGETHER AS A UNIT.

I think we retail merchants should march out and line up as in battle. We should stand together as a unit. We should say to the jobber, if you want our business, stop furnishing ammunition to our enemies, and supply us with such goods as we need to fight competition, pledging ourselves, at the same time, individually, to the jobber, that we will use such goods for that purpose only, and then advertise those goods along with other things, the same as the catalogue houses do. They offer a few items at cost and catch the trade. We should do the same, and as the catalogue competition gets stronger the closer we must deal. Stop saying yes to those who want credit and say no and tell them why—can't meet catalogue competition and sell on credit. Find out who it is of your customers that buy of catalogue houses. Make a list of them, hand your list to a dry goods merchant and ask him to do the same by you. See these people in person, get them into your store, talk it over with them; go into their homes, show them how deceiving the catalogues are and assure them that you will meet any legitimate competition.

THE RETAILER'S HOME OPPORTUNITY.

Some of these people are buying from their home merchants on time and sending their money away. You can stop your part of that if you know who they are. Let your trade know that the fight is on and that you are in the battle to win. Meet any catalogue price (quality considered). I regard home competition one of the greatest drawbacks in contending with the catalogue situation. I am afraid to make a fight on catalogue houses for fear my home competitor will jump on me, and if I reduce the price on hand saws to meet catalogue house prices, my competitor will reduce the price on nails, an item we do not need to cut the price on. If I say to a man, "I can't credit you because you send your money away to catalogue houses," that man will go to my competitor and get credit. If my customer sends to a catalogue house and buys all his builders' hardware for a building and then comes to me for nails and sash weights, I would like to charge him a profit, but my competitor sells him nails and sash weights at cost, in order to get him for a customer. If every retail dealer would join their retail dealers' association and attend their annual meetings and get in line, read the hardware journals, get in step and fire at every command, it would not take very long to control the situation. Do not try to stop the catalogue houses. If you are behind, catch up and get in the lead; if you are in the lead, work to stay there, and keep looking back all the time.

A SUMMARY.

I sum it up about like this: If the manufacturers think more of the catalogue house trade than they do of the jobbers', let them sell the catalogue houses exclusively; the jobber can attend to that. If the jobber thinks more of the catalogue house trade than he does the retailer's, let him sell the catalogue houses exclusively; and let us retailers see to that. If the manufacturer wants to sell us and sells cheaper than the jobber, then it is the duty of the jobber to cut his prices to meet the manufacturer's, the same as we retailers have to cut prices to meet catalogue competition. Make every dealer and manufacturer declare themselves. Start at the head; let the jobber see that the manufacturers confine their sales to the jobbing trade and let the retailers see that the jobbers confine their sales to the legitimate retail hardware dealers; and when this is done, we retailers will understand better how to dodge the bullets. But when they are pouring hot lead into us from every side, we do not know whether to stand or run; but when we know the source of the firing I think we can fortify ourselves and make a winning.

Every one knows that the fight is to be made by the retail dealers and if the jobbers will furnish us the right kind of ammunition and we do not waste it for profit-makers, we will certainly win the battle. It takes concerted action to accomplish anything. The retail dealers, jobbers and manufacturers should handle this catalogue proposition through their respective associations, and in order to do that successfully every one in sympathy with us must enlist.

The Arkansas Retail Hardware Dealers' Association is undertaking to get every legitimate retail hardware dealer in the state to enlist, and if we are successful we will make a showing for Arkansas next year that will surprise the natives. We do not expect to stop the catalogue house competition, but we do expect to regulate them and put ourselves on equal footing with them; and when we do that the battle is practically won. We do not ask that legitimate competition be stopped; we are able to meet honest competition.

Should Hardware Dealers Handle Incubators

VALUE OF POULTRY INDUSTRY.

The output of the poultry industry is almost as great in value as the wheat crop, and the demand among poultrymen and farmers for labor-saving devices and equipment is growing rapidly. There are probably as many incubators sold every year as corn planters, and there is also a large sale for brooders, brood houses, bone cutters and other modern inventions which are needed by those who want to make money out of poultry. The incubator business thus far has been conducted almost entirely on a mail order basis by the manufacturers, not because they are unable to get dealers to push in a satisfactory manner the sale of their goods. There are many reasons why the sale of incubators and related goods shoudl be controlled by implement dealers, and this trade could be developed into a profitable side line.

THE PIONEER INCUBATOR.

Until a few years ago incubators were very uncertain machines, producing more disappointment among purchasers than satisfactory results. The dealer was liable to reap more trouble than profit, and this is probably the chief reason why implement men have not taken more kindly to the "imitation hen." In the last few years, however, there have been great improvements in the construction of these machines, especially in the regulators and heaters, and the best machines on the market now give such good results that a dealer who is careful need not lose any money or make enemies by encouraging his customers to go into poultry on a business basis. The fact that there is still an element of uncertainty —that the purchaser with a poor, unsatisfactory machine— ought to give the dealer a strong hold on the trade. Any farmer except a mail order crank would rather pay more for a machine, with the guaranty of a good dealer, than to take the risk of ordering from a stranger 100 or 500 miles away, whose warranty has no practical value. The cheapest, poorest machines sold by mail usually have the strongest warranties in advertisements, but the manufacturers get cash in advance, and they seldom refund the money.

THE FOUR ESSENTIALS.

Any one of several first-class incubators on the market will give good results and hatch as large a percentage of eggs as a hen, if it is operated with a little common sense, and it will hatch 100 or 200 chicks at a time. Four things are essential: The proper adjustment of the regulator, keeping the lamp clean and trimmed regularly, turning the eggs regularly every day and regulating the ventilation so the eggs will not dry out too rapidly nor too slowly. Anyone with the intelligence and the memory to follow printed directions in looking after these essentials can get satisfactory results. A woman or girl who can do these things faithfully, and give the growing flocks the same degree of care, can make more money out of poultry than a farmer can make raising grain on a 160-acre farm.

AUTOMATIC REGULATORS.

The regulators on modern machines are automatic, and, if the machine be given proper attention in other respects, will hold the heat in the egg chamber within less than a degree of variation. The most common type of regulator is a brass flask, in the form of a disk, or a double disk. This flask is filled with a volatile fluid which vaporizes a little below the hatching temperature, so that the flask is filled with vapor under a slight pressure when the machine is fired up. This fluid is very sensitive to any change in temperature. A rise of a fraction of a degree will cause it to expand and bulge the disk, while a corresponding drop in temperature causes the disk to contract. This disk is set in the egg chamber, on a level with the egg tray, and a vertical rod resting on it controls, by a long lever, the movement of a damper or valve on the heater. There are other forms of regulators that give good results, one popular machine having a "thermostat" which consists of a horseshoe-shaped bar of metal, which spreads and contracts under changes of temperature, while another has a compound arrangement of bars which bulge when they are lengthened by heat. These three popular forms, the brass disk, the horseshoe thermostat and the compound bar, give good results as a rule. Once in a while, however, a regulator of the best type will prove defective and must be replaced, and this is one of the things that ought to give the implement dealer a leverage on the trade. If he understands his machine he can tell at a glance what is wrong when it does not work right.

HOT AIR SUPPLANTS HOT WATER.

Years ago the popular idea was to heat the egg chamber with a tank of hot water, but this system has been discarded by practically all the leading manufacturers, as hot air is found more satisfactory, with a good regulator. A lamp with a large bowl and a burner of ordinary size furnishes sufficient heat. The "heater" is usually outside the incubator. It has a metal chimney, sometimes with a return flue. Pure air is drawn from the outside through the heater and is warmed by contact with the chimney or flue, and passes through a pipe into the egg chamber. The heat is regulated by a damper on top of the heater, which, under control of the regulator, throws the warm air into the egg chamber when it is needed or allows it to escape when the chamber is warm enough or getting too warm. The lamps are all made with bowls large enough to run twenty-four hours without refilling. One reservoir lamp is advertised to run an entire hatch without refilling. Care is needed to keep the lamp clean and properly trimmed, as a smoky flame will soon coat the chimney or flues so that the air will not be heated sufficiently for the egg chamber. Most of the manufacturers claim that their lamps only need attention twice a day and need not be touched at any other time, but, of course, in irregular weather the flame might need to be turned up or down to help along the regulation of the heat.

CAUSES OF FAILURES.

Most of the failures in operating incubators are due to neglect of the question of ventilation, and this is something that a dealer ought to understand himself and impress carefully upon purchasers. There are a few cases where the regulators and heaters fail to work properly, with reasonable attention, but the question of ventilation is often misunderstood, especially by those who have had no experience in hatching.

DEVELOPMENT OF AIR CELLS.

Every egg has an air cell in one end, and this cell gradually enlarges during incubation, as the egg dries out. The development of the air cell must keep pace with the development of the chick. If the air in the egg chamber is not dry enough the egg will not dry out as it should and the chick will drown in the shell; while if the air is too dry the chick will shrivel up or be so weak it will not be able to pip and get out of the shell at hatching time. The development of the air cell can be controlled by the operator, by regulating the ventilation, and when this part of the work has proper attention one can count upon good hatches which will bring

a chick from practically every fertile egg. The manufacturers furnish instruction books, in which they have diagrams which show how large the air cell ought to be at various stages of incubation; and most of them furnish egg testers with their machines—a lamp, to be used in a dark room, with a dark chimney having a window in which the egg is held for examination. An incubator ought not to be sold without an egg tester. With the tester the infertile eggs can be taken out of the machine, and the air can thus be kept more wholesome for the developing germs or chicks. The percentage of infertile eggs, or those which have no male germ, is often surprisingly large, and a greenhorn who does not use the tester will be surprised that so many eggs do not hatch, when, as a matter of fact, nothing would hatch them, because nature did not place a germ in them. Hens lay just as well without fertilization, and many poultry experts advise keeping roosters out of the flock when eggs are only wanted for market, as they keep better when infertile. Infertile eggs are not so likely to foul the incubator as those in which the germ dies early.

REGULATORS ARE EASILY ADJUSTED.

The manufacturers construct their machines so well that but little intelligence is needed to adjust the regulator and run the heater, but the ventilation depends entirely upon the operator. Ordinarily the humidity of the air can be controlled by simply regulating the heat and the fresh air inlet. In a very dry climate, or at a high altitude, all machines usually require a little moisture, supplied by sitting a pan of water in the machine. Sometimes this is necessary in the central states, especially if the machine is a "dry" one, but most of the manufacturers design their machines so that under ordinary conditions it is not necessary to supply artificial moisture.

CARE OF EGGS.

The eggs must be turned regularly every day in all incubators or the yolk will stick to the shell and kill the chick. The hen seems to have a better memory in this requirement of hatching than some people who undertake to run incubators. There are to be found occasionally people whose memories are defective in so simple a matter as this, and their poor results have had much to do with the idea that prevails in some communities that incubators are not a success.

BROODERS.

The brooder, a little dog-house in which to keep the young chicks, with a heater and regulator to keep them at the right temperature, is a necessary investment for anyone who buys an incubator. The brooder is far more satisfactory than the hen in rearing chicks. It holds 100 to 200 chicks, which are kept in one place, and are easily fed and cared for, and a uniform temperature, with cleanliness and proper feed, will make the chicks grow faster with less risk of sickness or fatality. With the incubator and brooder chicks can be hatched and raised very early in the spring, so as to take advantage of the higher prices paid for "broilers."

THE PRINCIPAL THING TO DO.

The few points that have been given in this article on the mechanical features of the incubator problem show that the principal thing needed to run incubators successfully is intelligence and care on the part of the operator. The dealer who wants to make money out of these machines and the poultry supplies and other things needed in the poultry business ought to take a little interest in the business itself, so as to be able to advise his customers or tell them what is wrong if they do not get good results at the start. The profit that can be made is worth the effort.

LARGE PROFITS.

There is another feature of the question, however, that will appeal with peculiar force to many dealers. The "renter" is a growing factor in the market for implements, and a very unsatisfactory one for the dealer who is asked for credit. The renter who only raises grain has to work on a slender margin. An incubator and brooder will put many such a man on his feet. Poultry requires a very small investment, and chickens and other poultry can be raised for market in brooders, brood houses and other portable fixtures which cost but little money. The profit is very large on the investment. With a very small outlay one can make several hundred dollars a year without neglecting other farm work or crops. Corn and other grains fed to chickens bring $1 to $2 per bushel in market poultry or eggs—more money than can be realized in feeding hogs or cattle. The renter who is having a hard struggle to make a living can put himself in easy circumstances in a few months by giving a little attention to poultry, and if he is a man of intelligence he is a safe risk for a poultry outfit on credit when it would be rash to trust him for a buggy or anything else. What applies to the renter applies with equal force to the condition of thousands of small farmers who are too poor to buy the implements they ought to have for field work. The small farmer can make more money by applying himself to poultry than his neighbor can make raising grain on 160 acres of choice land. With a flock of 500 hens, not an excessive number, a man can make $1,000 to $1,500 a year and raise all the feed on a small place. Poultry is a branch of agriculture that has long been despised by the farmer, but incubators and other labor-saving machinery are placing the humble hen on a money-making basis that commands respect. A.

Herewith are given the opinions of some representative hardware dealers who have handled these goods:

A PROFITABLE LINE.

Sid R. Clift, Maxwell, Ia., writes:

We have handled them for a period of one year, and find it a very profitable line.

In starting the sale of these goods, we advertised them quite extensively. We are in the act now of getting out a circular to the trade. Our general letter we have not had printed yet. We are operating a machine here in the store with 121 eggs. After the chicks have hatched, we intend to keep them in the brooder for some time.

We think this business properly belongs to the hardware business, and it comes in a period when there isn't very much doing, and while it is true that a good many, in fact, the majority, of the manufacturers of incubators sell direct to the consumer, if one can find an incubator concern that sells direct to the dealer, and pushes this line, we think it profitable.

EXPLAIN WORKING OF MACHINE.

Morrissy & Ruhs, Audubon, Ia., write:

We have handled incubators for the last two years, and have found them profitable.

In starting the sale of these goods, we advertise them in the local paper.

We have not sent out any circulars advertising our incubators, but to interest our customers we simply explain the working of the machine.

We sell these goods ourselves, and would recommend the setting of machine so as to have the chickens come out on Saturday.

The great drawback to the business is in the number of factories that sell direct.

SOLD BY CANVASSING.

W. M. Wheelock, Boone, Ia., writes:

I have handled incubators for the last three years, and have found them profitable.

In starting the sale of these goods, I did not advertise them, but I canvassed and sent out circulars.

I sell these goods direct.

A PROFITABLE LINE.

Geo. W. O'Brien, Ames, Ia., writes:

I have handled incubators for the last five years, and have found them profitable.

In starting the sale of these goods, I advertised and sent out circulars.

I sell these goods direct, but have not taken any particular steps to interest my customers in this line.

Hardware men handling incubators should sell them for a profit.

The Hardware Record.

American Hardware Mnfs. Assn.
Pres., J. C. Birge, St. Louis, Mo.
Vice-Pres., F. S. Kretsinger, Cleveland, Ohio; Harry B. Lupton, Pittsburgh, Pa.; Geo. W. Corbin, New Britain, Conn.
Secy.-Treas., F. D. Mitchell, Phila.
Ex. Com., C. W. Asbury, Philadelphia, Pa.; Chairman; Robert Garland, Pittsburgh, Pa.; N. A. Gladding, Indianapolis, Ind.; Geo. P. Hart, New Britain, Conn.; Wm. M. Pratt, Greenfield, Mass., W. S. McKinney, Allegheny, Pa.; E. G. Buckwell, Cleveland, Ohio; E. B. Pike, Pike Station, N. H.

Arkansas Retail Hdw. Dealers' Assn
Pres., Hamp Williams, Hot Springs.
1st. V. P., T. B. Stewart, Newport.
2d V. P., R. P. Graham, Fordyce.
Sec.-Treas., C. E. Taylor, Little Rock.
Ex. Com., J. E. Maxey, Ozark; J. A. Plummer, Marianna; R. P. Allen, Van Buren; J. L. Davis, Magnolia, one year each; Frank B. Gregg, Little Rock; C. T. Rosenthal, Batesville; J. M. Pittman, Prescott, two years each.

Chicago Retail Hdw. Dealers' Assn.
Pres., H. E. Gnadt.
V.-P., G. A. Neeb.
Sec., G. R. Lott.
Collector, John Hora.
Treas. J. L. Smith.

Hardware Merchants' and Manufacturers' Assn. of Philadelphia.
Pres., Thomas Devlin.
V.-P., John R. Griffith.
S.-Treas., T. James Fernley.
Directors, W. W. Supplee, John R. Griffith, E. S. Jackson, W. C. Peters, S. Disston, E. Fisher, J. H. Ritter, T. Devlin, T. J. Fernley.

Indiana Retail Hdw. Dealers' Assn.
Pres., E. M. Bush, Evansville.
1st. V.-P., A. Shidler, So. Bend.
2d V.-P., T. J. Lindley, Jeffersonv'l
Sec.-Treas., M. L. Corey, Argos.
Members Ex. Com., W. P. Lewis, New Albany; Chas. E. Hall, Indianapolis; J. L. Fulton, Portland.

Illinois Retail Hdw. Dealers' Assn.
Pres., Charles H. Williams, Streator.
V.-P., W. T. Gormley, Chicago.
Sec., L. Nish, Elgin.
Treas., Geo. A. Englehardt, Chicago.
Ex. Com., Charles H. Williams, Streator; W. T. Gormley, Chicago, L. Nish, Elgin; Geo. A. Engelhardt, Chicago; Frank McKinney, Rockford; Chas. Johnson, Peoria; L. D. Ray, Belvidere; F. F. Porter, Chicago; Wm. Bittel, Peoria; H. G. Cormick, Centralia.

Indian Territory Retail Hdw. Assn.
Pres., A. L. Severance, Durant.
1st V.-P., Geo. W. Mowbray, Tulsa
2nd V.-P., W. J. Pettee, Oklahoma City.
Secy., W. G. Johnston, Oklahoma City.

Iowa Retail Hdw. Dealers' Assn.
Pres., S. R. Miles, Mason City.
V.-P., H. S. Vincent, Ft. Dodge.
Treas., A. C. Vieth, Oakland.
Members Ex. Com., T. A. Nichols, Burlington; D. A. Stauffer, Iowa City; W. B. Baumgardner, Dubuque; U. S. Johnson, Tama; F. W. Ritter, Hedrick; Thomas Gadd, Des Moines; F. F. Botlinger, Afton; Chas. Swaine, Council Bluffs; Wm. H. Millard, Cherokee.

Kansas Hardware Dealers' Assn.
Pres., Oscar Roehr, Topeka.
V.-P., E. J. King, Logan.
Sec.-Treas., J. A. Cole, Topeka.
Ex. Com., F. W. Bartlett, Kansas City; T. H. Kiniry, Beloit; J. M. Walters, Robinson; J. H. Hamilton, Arkansas City; T. J. O'Neill, Osage City.

Kentucky Retail Hardware and Stove Dealers' Association.
Pres., J. C. Frederick, Owenboro.
1st V.-P., J. C. Mahon, Lawrenceburg.
Sec., John R. Sower, Frankfort.
Treas., J. Steitler, Owensboro.

Michigan Hardware Association.
Pres., John Popp, Saginaw.
V.-Pres., F. M. Brockett, Battle Creek.
Treas., Henry C. Weber, Detroit.
Sec., A. J. Scott, Marine City.
Ex-Com., W. P. Culver, Portland; K. S. Judson, Grand Rapids; J. H. Whitney, Merrill; E. J. Morgan, Cadillac; T. Frank Ireland, Belding; Fred S. Cook, Fowlerville; C. E. Pipp, Otsego; A. Harshaw, Delray; A. J. Scott, Marine City.

Minnesota Retail Hardware Assn.
Pres., A. T. Stebbins, Rochester.
V.-P., George Evenson, St. Peter.
Sec., M. S. Matthews, Minneapolis.
Treas., G. F. Duerre, Plain View.
Ex-Com., W. H. Tomlinson, Le Sueur; J. H. Smith, Minneapolis; H. R. Schroeder, St. Paul; J. A. Roehl, Owatonna; W. T. Cowing, Alexandria; C. H. Casey, Jordan; Louis Gewalt, Breckenridge; Chas. F. Ladner, St. Cloud; J. F. McGuire, St. Paul; A. T. Stebbins, Rochester; Geo. M. Evenson, St. Peter.

Missouri Retail Stove and Hardware Dealers' Association.
Pres., Tayler Frier, Louisiana.
V.-P., E. L. Wachter, St. Louis.
Sec., F. N. Neudorff, St. Joseph.
Ex. Com., J. W. Poland, Carrollton; F. N. Kannsteiner, St. Louis; W. T. Shoop, Richmond.

National Hardware Association.
Pres., S. A. Bigelow, Boston.
1st V.-P., John C. Koch, Milwaukee.
2nd V.-P., Brace Hayden, San Francisco.
Ex. Com., F. Barker, Elmira, N. Y.; J. D. Moore, Birmingham, Ala.; John Freeman, Detroit; P. E. Strouss, Boston; R. M. Dudley, Nashville; W. S. Wright, Omaha.
Advisory Board, W. W. Supplee, Philadelphia; H. H. Bishop, Cleveland; John Bindley, Pittsburg; R. A. Kirk, St. Paul.

Nebraska Retail Hdw. Dealers' Asn.
Pres. J. C. Cornell, Ord.
Vice-Pres., F. D. Kees, Beatrice.
2d V.-P., Max Uhlig, Holdrege.
Sec.-Treas., H. J. Hall, Lincoln.
Ex. Com., W. J. Jakway, Lincoln; Theo. Sinbold, Omaha; Alex F. Meyer, Hastings.

National Retail Hdw. Dealers' Asn.
Pres. W. P. Bogardus, Mt. Vernon, O.
V.-P., W. H. Tomlinson, LeSueur, Minn.
2d V.-P., F. C. Moys, Boulder, Col.
Sec., M. L. Corey, Argos, Ind.
Treas., A. T. Stebbins, Rochester, Minn.
Ex. Com., T. Frank Ireland, Belding, Mich.; James N. Kline, Williamsport, Pa.; Frank F. Porter, Chicago; S. E. Jones, Richmond, Ind.; A. H. Abbe, New Britain, Conn.

N. Dakota Retail Hdw. Dealers' Asn.
Pres., H. F. Emery, Fargo.
1st V.-P., G. W. Wolbert, Bismarck.
2d V.-P., A. C. McNiven, Langdon.
Sec., C. N. Barnes, Gand Forks.
Treas., H. T. Heigesen, Milton.
Ex. Com., E. E. Elliott, Sanborn; H. F. Strehlow, Casselton; Hurbert Harrington, Fargo.

Ohio Hardware Association.
Pres., John F. Baker, Dayton.
V.-P., C. S. Johnson, Barberton.
Cor. Sec., Frank A. Bare, Mansfield.
Fin. Sec., W. C. Jones, Columbus.
Treas., L. F. Stahler, Waverly.
Ex. Com., John C. Fuhr, Williamsburg; John Kramer, Dayton, C. W. Jewell, Utica; W. A. Perry, Zanesville; Frank W. Ingalls, Byran.

Pennsylvania Retail Hdw. Assn.
Pres., Geo. L. Moore Brownsville.
V.-P., Geo. J. Rudolph, Pittsburg.
Sec., J. E. Digby, McKees Rocks.
Treas., B. A. Maggine, Braddock.
Ex. Com., E. E. Lyon, Greensburg; C. N. Savage, California; B. A. Maggine, Braddock; C. O. Shroyer, Dawson.

St. Louis Stove Dealers' Assn.
Pres., R. H. Myers.
1st V.-P., E. L. Wachter.
2d V.-P., G. M. Rinie.
Sec., Louis Boehl.
Treas., F. A. Kannsteiner.

Southern Hardware Jobbers' Assn.
Pres., W. M. Crumley, Atlanta, Ga.
1st V.-P., John Donnan, Richmond, Va.
2d V.-P., E. A. Peden, Houston Texas.
Ex. Com., Bruce Keener, Knoxville, Tenn.; Chas. Ireland, Greensboro, N. C.; O. B. Barker, Lynchburg, Va.

Texas Retail Hdw. and Imp. Assn.
Pres., S. L. Erwin, Honey Grove.
1st V.-P., W. M. Gunnell, Marlin.
2d V.-P., J. D. Carroll, Quanah.
Sec. & Treas., J. W. McManus, Waxahachie.

Wisconsin Hdw. Dealers' Assn.
Pres., H. L. McNamara, Janesville.
V.-P., Ralph Burtis, Oshkosh.
Sec.-Treas., C. A., Peck, Berlin.
Ex. Com., W. H. Busse, Milwaukee; E. R. Ramm, New London; H. S. Scofield, Sturgeon Bay; R. Murdoch, Beloit.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 44 to 48 inclusive.

John Barr is a new Ogdensburg, N. Y., hardware dealer.

S. E. Alexander & Son are located at Dale, Okla. Ty.

Geo. J. Gregory has opened a new hardware store at Utica, N. Y.

Coc & Shira are a new hardware firm located at Parkers Landing, Pa.

Amil Schmitz succeeds J. K. Wolverton in the hardware business at Derby, Ia.

G. P. Selzer succeeds M. D. Gates in the hardware business at Windom, Minn.

Wozab & Ford, Humboldt, Nebr., hardware dealers, are erecting a new building.

John Boller, a Wentworth, S. D., hardware merchant, was drowned recently.

T. S. Marshall succeeds Aaker Bros. in the hardware business at Jasper, Minn.

J. C. Hartsough has sold his hardware business at Oak, Nebr., to I. W. Harrison.

J. K. Shoening, hardware dealer at Ross, N. D., has filed a petition in bankruptcy.

Lerin & Burreson have sold their hardware store at Mabel, Minn., to Fred Donald.

Lewis & Kirkham succeed Haigler & Lewis in the hardware business at Lebo, Kans.

J. D. Porter has sold his hardware business at Steubenville, O., to Weir & McClave.

Elter & Co. have purchased the hardware business of B. L. Neff at Bridgeport, Nebr.

Petheram & Leighton succeed J. C. Petheram in the hardware business at Kanawha, Ia.

T. E. Molacek has sold his hardware business at Schuyler, Nebr., to Craig & Morris.

C. C. Sheldon & Son succeed E. L. Kingsley in the hardware business at Madison, S. D.

A. L. Henry, Indianapolis, Ind., has embarked in the manufacture of rural mail boxes.

Sellers & Sons succeed Driskell & Stanley in the hardware business at Haddam, Kans.

Geo. A. Riley & Co. succeed James A. Riley & Co. in the hardware business at Goshen, Ind.

I. L. Hockett succeeds Denny & Hockett in the hardware and stove business at Manila, Ia.

Charles McConnell has sold his general hardware business at Irwin, Ia., to Peter Steenhusen.

C. C. Cruikshank has sold his hardware and stove business at Poland, N. Y., to A. E. Sprague.

It is said that Siegel Bros., furniture and hardware dealers at Hibbing, Minn., have discontinued.

Burr, Forbes & Son, Arispe, Ia., hardware dealers, are erecting a store 20x100 feet in dimensions.

The people of Asheville, N. C., are extending a cordial invitation to the Southern Hardware Jobbers' Association and the American Hardware Manufac-

turers' Association to hold their 1905 meetings in that city.

The Hillsdale Screen Co., Hillsdale, Mich., have increased their capital stock from $30,000 to $60,000.

Wm. M. Jack, for a number of years a pioneer hardware merchant of Butte, Mont., died on July 19th.

Union Hardware and Metal Co., Los Angeles, Cal., has increased its capital stock from $600,000 to $1,500,000.

The New Hardware Company located at Belview, Minn., are succeeded by the Thompson-Brown Hardware Co.

The Peter F. Tague Co. are a new Boston, Mass., concern and will deal in iron, steel, hardware. They are capitalized at $5,000.

The Rochester Ideal Specialty Co., are a new Rochester, N. Y., concern, capitalized at $5,000, for the manufacture of vegetable slicers.

The Mason City Implement Co. has changed its style to Loomis & Dunlay and has increased their capital stock from $15,000 to $25,000.

The fifth annual Ironmongery Hardware, Electrical and Allied Trades Exhibition and Market started at the Royal Agricultural Hall, London, on July 12th last.

Wm. M Powell, Cleveland, O., is among the organizers of the Ferrokraft Co. of that city, successors to the patents and good will of the Universal Fastener Co.

E. T. George & Co., who have been in the hardware business for a number of years at 31 Weybosset street, Providence, R. I., are selling out their hardware stock.

W. A. Gill, A. J. Gill and F. H. Irwin are the incorporators of the Gill Gas Engine and Machine Co., Portland, Ore., capitalized at $15,000, for the manufacture of gas engines.

Josiah Williams, James S. Taylor, A. S. Tuttle, J. G. Matteson and W. J. McGrew are the incorporators of the Wayne Handle Company, capitalized at $10,000. They are located at Creston, O.

Michael C. Ryan, Rollo G. Jermyn and Geo. H. Bond are the incorporators of the Michael C. Ryan Co., Fulton, N. Y., capitalized at $5,000, for the manufacture of hardware specialties.

W. S. Carlton, John B. McFarland and W. H. Henderson are among the incorporators of the Henderson Mfg. Co. of Aberdeen, Miss., capitalized at $50,000, for the manufacture of hardware.

Jas. E. McClellan, William L. James, Condon E. Varina, John H. Meagher and Geo. F. Smith are the incorporators of the McClellan Hardware Co., Baltimore, Md., capitalized at $20,000.

C. L. Tuttle, C. B. Ernst and F. M. Huggins are the incorporators of the Tuttle Mfg. Co., Buffalo, N. Y., capitalized at $50,000, for the manufacture and sale of the Tuttle post hole augers.

Rudolph Born, for a number of years in the hardware business in Chicago, died of apoplexy on July 22d last at his residence 1818 Magnolia street, Chicago. He was in the 81st year of his age. He leaves two sons and one daughter. The body was cremated at Graceland cemetery on July 25th.

Schoverling & Welles succeed Schoverling, Daily and Gales of 2 Murray street, Milwaukee, Wis. The members of the new firm are Albert A. Schoverling, Henry S. Welles and Frederick W. Schoverling.

The Robles Hardware Co., 910 Franklin street, Tampa, Fla., were visited by burglars on July 23d last, and two breech-loading shotguns, 300 rounds of ammunition and several pocket knives were stolen.

The Lake Bros. Hardware Co. of Dallas, Tex., have sold their stock to the Vordenbaumen-Eastham Co., Ltd., located at Shreveport, La. J. A. Lake of the Dallas concern will act as secretary of the consolidated company.

The National Wire Cloth Co. are a new Niles, Mich., concern, capitalized at $50,000, for the manufacture of wire, wire cloth and screen. F. A. Hastings, C. K. Anderson and A. E. Dennis are the incorporators.

Thomas W. Monroe, a hardware dealer suffering under the hallucination that he was on the verge of financial ruin, committed suicide at his residence, 516 Decatur street, Brooklyn, N. Y., July 25th last. He left insurance amounting to $50,000.

Bommer Bros., 256-270 Classon avenue, Brooklyn, N. Y., are sending the trade a little postal which will clearly guide them to the handsome exhibit of Bommer's steel hinges in the Palace of Manufactures' Building, at the Louisiana Purchase Exposition. This exhibit is located at the corner of aisles 5 and C in this building.

The Wilmot Castle Co., Rochester, N. Y., are meeting with unusual success in their sales of the New Era radiator, which they manufacture in several styles for stove pipes. They have something new for conserving the heat of furnaces and boilers and increasing the heating capacity of these popular heaters at least 25 per cent. They would be glad to correspond with dealers concerning agency for this specialty of theirs.

The Milwaukee Retail Hardware Dealers' Association will hold their second annual excursion on Sunday, August 7th, at Hilgen's Spring Park, at Cedarburg, Wis. The dealers will take with them a newsboys' band and will spend the entire day at the park, leaving the Union depot at 8 in the morning and returning from Cedarburg at 8 p. m. The excursion of the society held last year at The Dells was unusually successful from every standpoint.

The Ziegler Neckyoke Co., Coffeyville, Kan., are manufacturers of neckyokes and neckyoke centers. The Ziegler center is, it is claimed, the only automatic lock neckyoke center on the market. It is made of malleable iron, guaranteed and perfectly reliable. Should the harness tug come unhooked or the singletree break the outside ring of the center slips back, as soon as the yoke goes forward, and automatically locks on the pole flange. When placing on the tongue the user does not have to turn the yoke upside down.

The Holiday Mfg. & Engineering Co. have removed from 200-202 S. Clinton street, Chicago, Ill., to 100 Banker street. Their specialties include the

Holliday gas and gasoline engine for stationary, portable, marine and automobile uses. They also make the Diamond carpet stretcher, which by turn of a crank, stretches the carpet to any tension desired and holds it in position wherever the crank is stopped without the crank being held or fastened, admitting the free use of both hands by the operator for adjusting and tracking down the carpet. They also make the Herbert clamp. By the self-adjustment of the loose lower jaw and oscillating button on the top jaw of this clamp, it can be used on bevel as well as level surface.

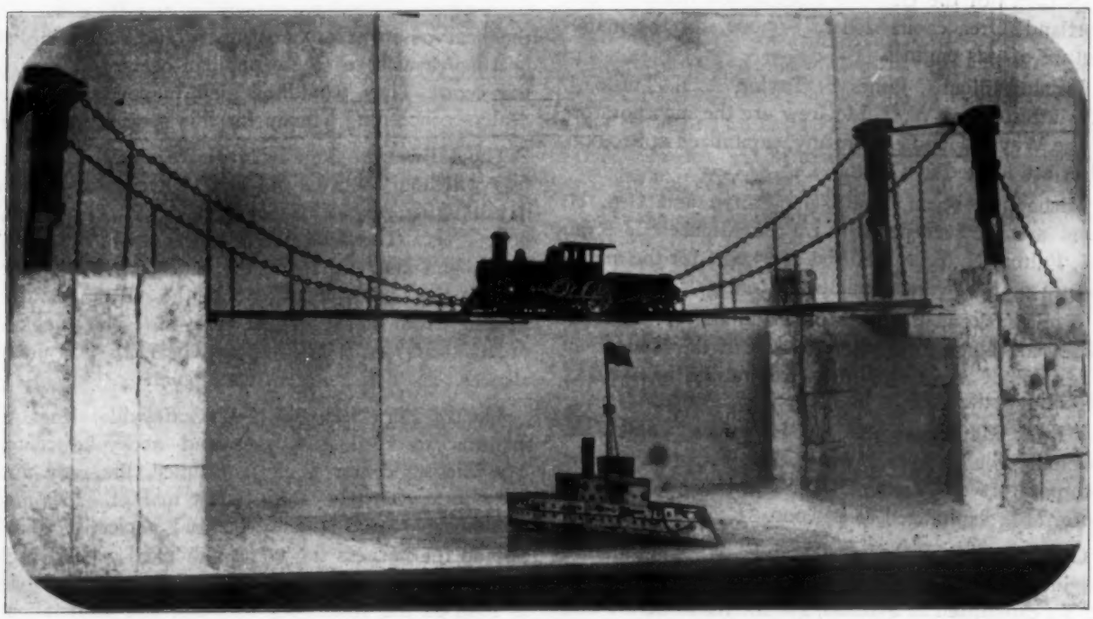
The Rhodes Mfg. Co., Grand Rapids, Mich., send us a little circular showing the Rhodes double cut pruning shear, hand pruner and Rhodes wood handle pruner.

The Rhodes double cut pruning shear prevents the shear blades from drawing together and cutting themselves. The points of this shear pass by each other before the shear cuts into the limb far enough to draw the blades. These double cut pruners are finely finished and are made from the best quality of material. The shear blades are forged from tool steel and are carefully ground and tempered. The handles are turned from No. 1 maple. The ferrules are of wrought iron four inches long with an extra ferrule one inch long on the end. There is a rivet put through the ferrule, handle and shank of shear, which keeps the ferrule and shear from coming loose from the handle.

SUSPENSION BRIDGE FOR WINDOW DISPLAY.

R. L. Weller, Leadville, Col., sends us a photograph showing a "Suspension Bridge" used as a window display and shown herewith.

The suspension bridge was made as follows: The piers were of asbestos bricks, the towers of 21-inch Coe's wrenches, the cables of brass jack chain, the cross beams of steam gauge guards, the water was made by covering bright tin with glass, and the land under the bridge was asbestos cement, all being taken from articles carried in stock except the toy engine and boat, which were added to give effect. This window was a center of attraction, receiving marked attention in spite of its simplicity in construction.



Suspension Bridge for Window Display.

HINGES.

Bommer Bros., 256-270 Classon avenue, Brooklyn, N. Y., send us a small catalogue calling attention to a variety of their hinges and other goods. Their line of hinges includes the Bommer spring hinges, planished steel, double action and single action, the Bommer spring hinges polished steel double and single action, solid bronze or brass single and double action.

Bommer's polished steel hinges double or single action come in bronze, brass or nickel plated, also genuine rustless black finish, antique copper, antique brass or dull brass finish and verde antique finish and silver finish and silver plated either bright or oxidized. These hinges also come in solid bronze or brass in practically the same finishes as those for polished steel.

The Bommer ball-bearing floor spring hinges can be fitted to the corners because the shoe is adjustable. The door will close automatically from either side, slow or fast, as desired, because the spring power is adjustable. They are very compact, taking up but little room. They are balanced on raised center post, the ball bearing giving an easy motion to the door and is protected from dirt and water. All parts are interchangeable.

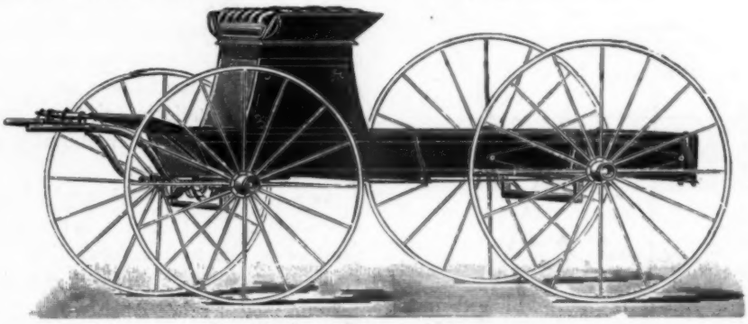
Other goods shown in this catalogue are the Bommer pivot hinges, cast metal boxes, lavatory spring hinges, strikes for lavatory doors, Bommer box flanged spring hinges, Bommer yoked spring hinges, surface spring hinges, Bommer checking hinges, push plates, kick plates, bolts, nuts and washers. One of these catalogues will be sent to the trade on application. When writing for same, kindly mention "Saw it in THE AMERICAN ARTISAN."

HARDWARE DELIVERY WAGON.

The Sycamore Wagon Works, Sycamore, Ill., have a specialty which naturally appeals to the trade in their low down, short turn hardware delivery wagon.

They have recently built a factory, 800x75 feet in dimensions, which is probably the most complete factory of its kind in the world.

Any old wagon will do for a hardware dealer; then, again, it won't do at all, you know. The average delivery wagon is so high that there is too much unnecessary lifting of stoves and heavy articles, too much danger of tipping, too much rattling, too much breakage, too much time wasted, too much backache, too much horsepower wasted, etc.



Hardware Delivery Wagon.

This firm's hardware wagon has been a heavy seller. This is a wagon adapted to nearly all kinds of business where it is desired to carry a medium heavy load on springs. The seat is high so as to give clear room for the load to front of body. It is a very roomy wagon and if desired can be built as a stake wagon. The body is 20 inches from the ground. The wagon will turn short box 20 inches from the ground, and the loaded truck can be run into the wagon without any lifting.

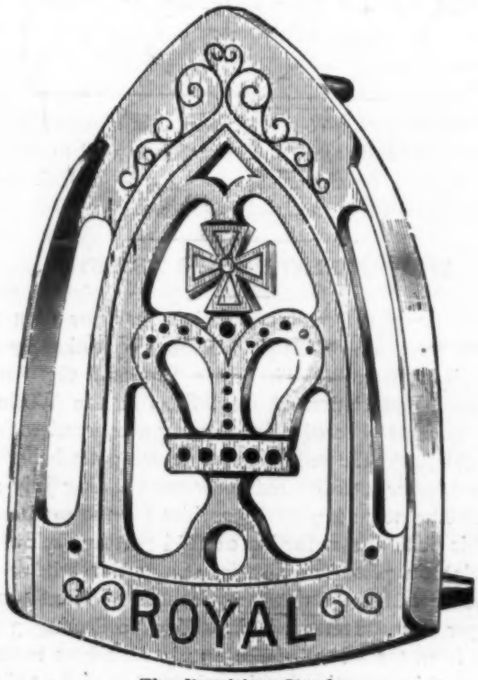
THE MARION HARLAND COFFEE POT.

The accompanying cut shows the Marion Harland coffee pot, made by Silver & Co., 18 Warren street, New York. This coffee pot is extensively advertised, and is claimed to be the best selling coffee pot in the world. It is made in block tin plate and handsomely finished and nickel plated. Its construction and operation is fully shown by the cut.

THE ROYAL IRON STAND.

The Franklin Specialty Co., Reading, Pa., are manufacturers of the Royal iron stand shown in the accompanying illustration.

This is handsomely designed, is made of the best iron and is nickel plated in an extra high grade manner. Its weight is 9 ounces, and it will hold any iron.



The Royal Iron Stand.

BUSINESS CHANGES.

Sanborn, N. D.—Elmer Elliott is erecting a warehouse 24x40.

Puyallup, Wash.—The F. A. Stewart Hardware Company are remodeling their large store.

Johnstown, Pa.—Buterbaugh & Claycomb have their stock in their own building.

Waco, Tex.—The Bomar Hardware and Buggy Company have amended their charter and increased their capital stock from $20,000 to $40,000.

Park Falls, Mass.—Garvin J. Davies has filed a petition in bankruptcy.

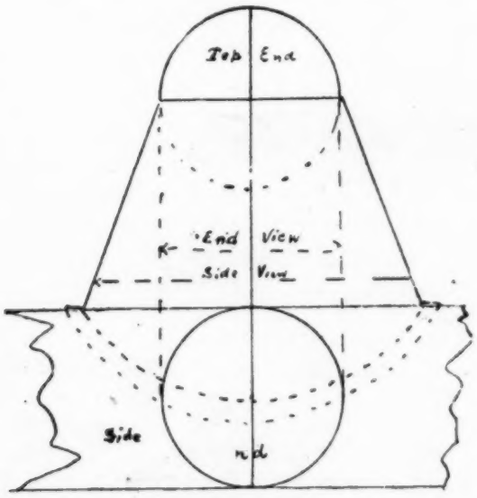
Blairsburg, Ia.—C. M. Powers has filed a petition in bankruptcy.

Tinshop

TEE JOINT PATTERN.

To The American Artisan.

Will some brother tinner give through the columns of the "Tinshop" department patterns for a tee-joint as shown in this sketch? I will call this a round to an



oval mitering on a round pipe equal in diameter to the round end of the tee. Both the side as well as the end view is given for this problem. "B. S. E."

Michigan City, Ind., July 25, 1904.

THE TIN PLATE SCALE ADJUSTED.

The tin plate scale for another year has been adjusted by a settlement of the rebate question by the American Sheet & Tin Plate Co. and the Amalgamated Association of Iron, Steel & Tin Workers. The workers succeeded in securing a concession from the company, the reduction on rebate plate being cut in two, after a protracted conference ending July 23d last. The new agreement provides for the production of this plate at a reduction of 12½ per cent below the regular tin plate wage scale. Since this scheme became operative the company secured a concession of 25 per cent. Hereafter, instead of collecting 3 per cent from the wages of the tin plate workers to make up for this reduction on the rebate plate, only 1½ per cent will be deducted. The agreement dates back to July 1. Practically all of the independent sheet and tin plate manufacturers have already signed the Amalgamated scales for the ensuing year, and the trouble that was anticipated several weeks ago is averted. Within the past week the following manufacturers have signed the sheet or tin plate scale: Alcania Co., Avonmore, Pa.; Youngstown Iron & Steel Roofing Co., Youngstown, O.; American Rolling Mill Co., Middletown, O.; Youngstown Iron Sheet & Tube Co., Youngstown, O.; Niles Iron & Steel Co., and the Empire Iron & Steel Co., Niles, O.

Other concerns have signed the union scale as follows: Sligo Iron & Steel Co., Connellsville, Pa.; Weller Rolling Mill Co., Anniston, Ala.; Colonial Steel Co., Monaca, Pa.; Pittsburgh Forge & Iron Co., Allegheny, Pa.; Ewald Iron Co., Louisville, Ky.; Westerman & Co., Lockport, N. Y.

The scale of the tin house workers affiliated with the Tin Workers' International Protective Association was adjusted last week. The new scale went into effect July 20th and will remain in force until July 15, 1905. The workers' representatives accepted a reduction of 5 per cent on terne dippers; 3 per cent for terne catchers; 5 per cent for combination terne dippers; 3 per cent for combination terne catchers and 3 per cent for all other tinhouse employes outside dippers and catchers who are making $1.60 a day or over. A few minor changes were made in prices on special machines and footnotes that do not materially affect the earning power of the workers.

As a result of the settlement of the scale the American Sheet & Tin Plate Co. is preparing to place a large number of idle mills in operation. At New Castle the Greer and Shenango plants containing 50 mills will resume next week. At Elwood, Ill., twenty mills are in operation and the remainder will go on as soon as necessary repairs can be completed. At Gas City and Anderson, Ind., all of the mills of the company are operating in full.

TIN HOUSE SCALE SETTLED.

At a conference at Pittsburgh lasting several hours, the officials of the American Sheet & Tin Plate Co. effected a settlement of the tin house wage scale for the ensuing year with the representatives of the Tin Plate Workers' Protective Association on July 21st. The settlement was made on a basis of a reduction of 4½ per cent from last year's scale. In consideration of the acceptance of this reduction by the union men the company withdrew its demand that the workmen agree to a rebate on orders formerly filled by Welsh manufacturers and gave the workmen many concessions which they had not heretofore enjoyed. In view of the present unfavorable condition of the tin and terne market, it is considered that the workmen have obtained a decidedly better settlement than was expected by the committee representing the union at the conference.

RECOVERY OF TIN SCRAP.

In Germany 30,000 tons of tin-scrap are now worked up annually in seven factories operating on the electrolytic process, metallic tin being recovered. Although the use of other electrolytes has been proposed and patented, sodium hydrate is stated to yield the best results. In Austria one tin recovery works is stated to be in operation; and England possesses one small experimental plant at Manchester.

Germany at present is drawing supplies of scrap for the seven works referred to from England, France and Switzerland, the home supply proving insufficient to meet the requirement of the works. This state of things is unlikely to continue, says the Iron and Coal Trades Review, and it is evident that a well-situated electrolytic recovery works, with a good organization for the collection and transportation of the scrap and cuttings, is demanded, and will some day be found in operation.—Ex.

The Crane Co., Chicago, have made an increase in their stock from $7,000,000 to $10,000,000.

NOTES AND QUERIES.

JONES FARM GATE.

From E. P. McEvoy, Gilmore City, Ia..

Who makes the Jones farm gate?

(Can any of our readers answer this question?—ED.)

HORSE SHOE MAGNETS.

From The Mercer Vending Co., Columbus, O.

Where can we buy horse shoe magnets?

Ans.—J. H. Bunnell & Co., 76 Cortlandt street, New York; General Electric Co., Schenectady, N. Y.; Norton Electrical Instrument Co., Manchester, Conn., and the Western Electric Co., 242 South Jefferson street, Chicago, Ill.

SECRETARY OF THE NATIONAL ASSOCIATION OF THE MASTER STEAM AND HOT WATER FITTERS.

From O. H. Allinson, Jobstown, N. J.

Would you kindly give us the address of the secretary of the National Association of the Master Steam and Hot Water Fitters?

Ans.—Henry B. Gombers, New York city.

GOODRICH STEAM COOKER FOR KITCHEN USE.

From Chas. Beed & Son, Hampton, Ia.

Will you kindly furnish us address of the company which makes the Goodrich steam cooker for kitchen use?

(Can any of our readers answer this question—Ed.)

ITEMS.

Chas. A. Hicks succeeds Hicks & Parsons in the roofing, cornice and stove business at 911 Third avenue, Baltimore, Md.

The Greer and Shenango plants of the American Sheet & Tin Plate Co., have resumed operations after a short shut down for repairs.

John A. Hayden, Edward Hayden and Isabella G. Hayden are the incorporators of the John A. Hayden Slate Co., St. Louis, Mo., capitalized at $10,000.

Gerald A. Lough, Hector Lough and Arthur J. Manger are the incorporators of the Smith American Metal Co., Plainfield, N. J., capitalized at $100,000.

Jas. B. Shannon, C. R. Sickles and William H. Reynolds are the incorporators of the Columbia Anti-Friction Metal Co., New York city, capitalized at $100,000.

Albert Foyer, E. H. Joseph, E. J. Thobaben, J. Vining and A. R. Callow are the incorporators of the Foyer Steel Stamping Co., Painesville, O., capitalized at $20,000.

At a recent meeting of the stockholders of the Wheeling Roofing and Cornice Co., Wheeling, W. Va., the capital stock of that concern was increased from $200,000 to $1,000,000.

The style of the Peru Sheet Metal Plating & Novelty Co., Peru, Ill., has been changed to the National Plated Metal Co., and the capital stock has been increased from $35,000 to $60,000.

C. W. Truxall is president; A. F. Baumgarten, vice-president; E. M. Beachley, secretary; E. R. Floto, treasurer, and T. J. Costello, general manager, of the Meyersdale Sheet Steel Co., Meyersdale, Pa., capitalized at $50,000, for the manufacture of sheet steel.

The Gahm Mfg. Co. and the Imperial Stand Co., both of Streator, Ill., have incorporated as the Streator Metal Stamping Co., with P. C. Forrester as president, L. P. Halladay, general manager, and E. G. Zilm as secretary.

The C. E. Pruden Co., Baltimore, Md., recently incorporated for the manufacture of architectural fireproof doors, etc., has purchased the Baltimore plant of the St. Paul Roofing, Cornice and Ornament Co., St. Paul, Minn.

Joseph T. Ryerson & Son, Chicago, send us a little circular calling attention to their Lightning portable hand punch, which will punch holes in ferrules two inches in diameter and larger; also hub bands, manholes, tank heads or curved surfaces after the work is formed in any position or degree of curvature. It punches light angles or flanges half-inch from the flange or corner, and many other things that cannot be done on a machine punch.

The entire unencumbered assets of J. L. Perkins & Co., formerly in the sheet metal business at 235 Lake street, Chicago, will be sold at public auction on Thursday, August 4th, at 10 a. m., from the premises formerly occupied by this firm. This is by virtue of an order of the District Court of the United States, entered on July 19th by Sidney C. Eastman, referee in bankruptcy. The property consists of tin, sheet iron, steel ceiling, copper, tinners' machinery and tools, etc.

The Galesburg Cornice Works, Galesburg, Ill., are experiencing an extraordinary demand for their American Boy collapsable horns these being ordered in large quantities from all sections of the country by Republicans, Democrats, Prohibitionists, Populists, Socialists, Single Taxers and other politicians for campaign purposes. There is also an extra large demand from dealers located in trade circles embracing educational institutions of different kinds as these are great rooters' horns. They are made of bright tin in sections which telescope together. When the horn is extended it is 14 inches long and when collapsed is 4½ inches long and three inches in diameter, which enables it to be easily put in the pocket. As to the racket it makes, we can say that rumor has it that several attempts have been made to assassinate the officials of this company by anti-noise fanatics.

A NEW VERSION.

Billy Jones wrote on the blackboard:

"Billy Jones can hug the girls better than any boy in school."

The teacher, seeing it, called him up. "William, did you write that?"

"Yes, ma'am," said Billy.

"Well, you can stay after school," said she.

The children waited for Billy to come out, when they began to guy him. "Got licken', didn't ye?"

"Nope," said Bill.

"Get jawed?"

"Nope."

"What did she do?" they asked.

"Shan't tell," said Bill, "but it pays to advertise."—Implement Trade Journal.

Heating and Ventilating

J. Riley is a new Camden, N. J., heating man.

The Caldwell Heating and Ventilating Co., Toledo, O., will build and operate a foundry at Galena, Mo.

The Chester Heating and Plumbing Co., Chester, S. C., were visited by fire recently. Their loss is estimated at $2,500.

L. C. Kurtz is among the incorporators of the Waterloo Plumbing and Heating Co., Waterloo, Ia., capitalized at $10,000.

Edw. T. Noble, C. F. Moore and J. S. Huey are the incorporators of the Illinois Heating and Lighting Company of Chicago, capitalized at $15,000.

James McEvoy, J. J. Smith and M. V. Wilson are the incorporators of the Vendor Co. of New York city, capitalized at $4,000, for the manufacture of ventilating devices.

The Supervisor of the Treasury Department, Washington, D. C., will receive bids until August 29th, for the heating apparatus for the United States postoffice at Moberly, Mo.

Gurdon G. Wolfe, president and treasurer of the Fowler & Wolfe Mfg. Co., Philadelphia, the well-known radiator manufacturers, died at his residence in that city on July 18th.

On July 23d last the Lennox Furnace Co., Marshalltown, Ia., shipped a carload of their furnaces to a Pittsburgh, Pa., dealer. Within the last month they have made carload shipments to Denver, Col.; St. Paul, Minn., and Winnipeg, Can.

The James Smart Mfg. Co., Ltd., Brockville, Ont., exclusive Canadian makers of the Kelsey corrugated warm air generators, send us some very attractive advertising matter in the shape of some artistic aquatic views, all taken on the St. Lawrence river near Brockville, Ont.

The Rollyn Hawkins Co., Indianapolis, Ind., are a retail furnace firm who are to be congratulated on the very attractive catalogue they have just issued. This is handsomely bound in light red cover, and is atractively printed in blue on an enameled book paper. The line of furnaces they handle is described under their own name as the Rollyn Portable furnace, and the handsome half tone cuts show the Rollyn ash pit, Rollyn grates, Rollyn fire pot, Rolyn damper and Rollyn radiator. On page 9 of this volume is a large cut showing a combination heating plant in a twelve-room residence. Pages 11 and 15 of this volume exclusively are devoted to strong testimonials from Indianapolis parties who have used the Rollyn furnace with satisfactoion. This catalogue is one containing many points from which other dealers can profitably pattern.

A good ink for writing on glass is given by the Photo-Beacon. Dissolve 60 grains of shellac in 1 ounce of alcohol and, separately, 90 grains of borax in 1½ ounces of water. Mix the two solutions gradually, almost drop by drop, and if a deposit forms, heat at once. Then add enough aniline dye of any color desired to give it density. The amount of water used is an important factor and should be just enough to make the ink flow easily from the pen.

WEIR FIRE POT AND GRATE.

The Meyer Furnace Co., Peoria, Ill., are manufacturers of the Weir furnace, whose fire pot and grate are shown herewith.

The fire pot is so constructed with channels that the air introduced and heated for the purpose of promoting combustion must pass around the entire fire pot a number of times before it is discharged, and then in a diffusive manner, over the entire fire. This causes the fire to burn from the top down and from the circumference to the center, economizing fuel and giving quick results. Having a continual circulation of air around the fire pot prolongs the life of it and superheats the air before mixing with the volatile gases in the combustion drum.

Weir Sectional Fire Pot.

The Weir bowl is built on perpendicular lines and corrugated, allowing of a grate surface exceptionally large in proportion to the bed of fuel. There is therefore less liability of fuel packing, a freedom from the forming of clinkers and much less liability of the burning out of grates, it is claimed.

The Weir bowl is made sectional, any part being easily replaced through the feed door.

This firm are now prepared to furnish Weir fire pots made of the very best quality of fire clay. These tile linings are built on the same lines as their cast iron ones and have the same famous gas burning features.

THE THOMAS CAT.

We love to hear the tom-cat growl,
On the alley fence at night;
He puts his soul in his fervent yowl
And lets 'er rip with might!
"Yeow! Yeow!! Meyow!!!"

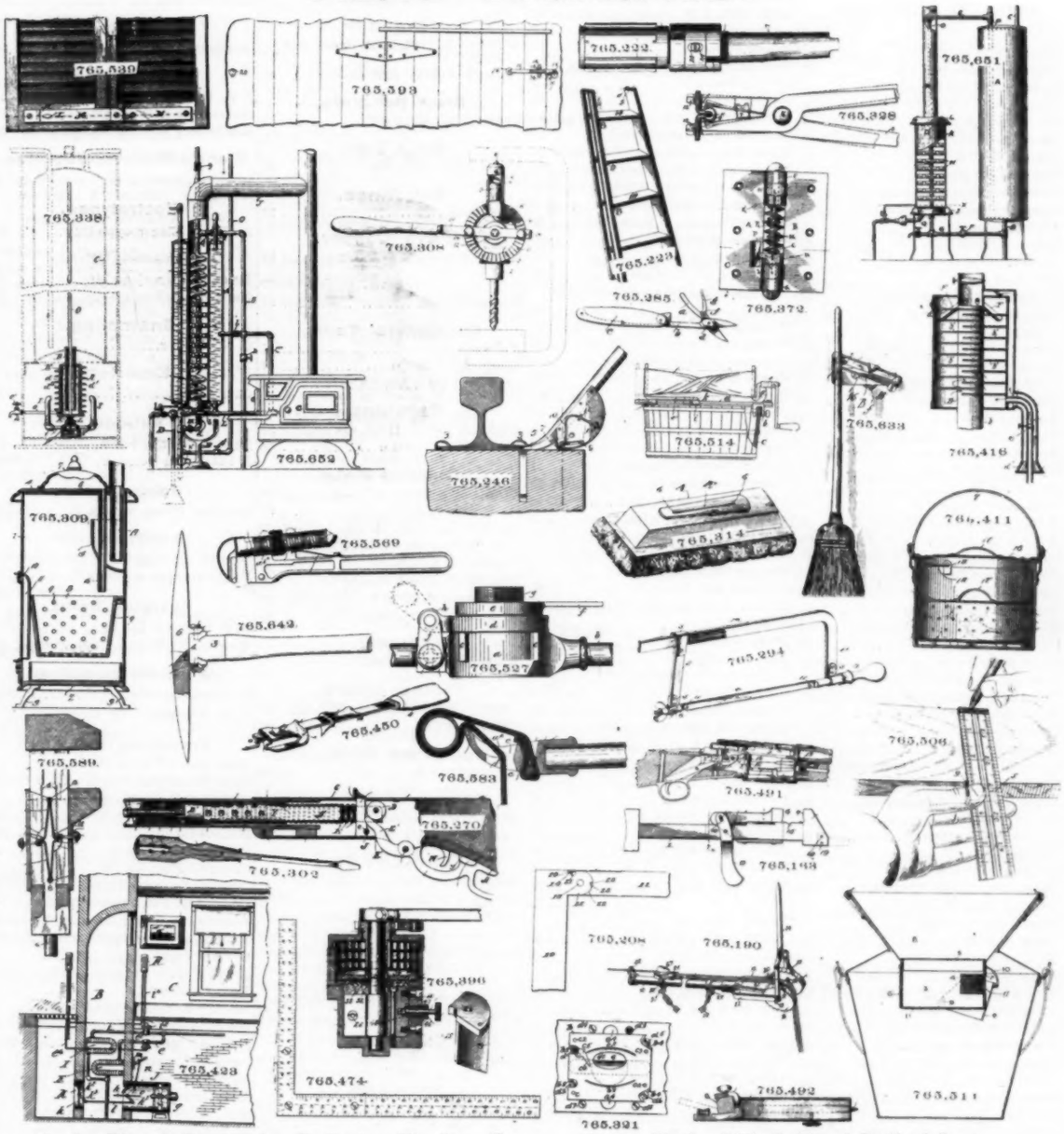
We joy to list that Thomas-cat,
As he strikes crescendoes high;
His soul is wrapt in the biz he's at
Tho' bootjacks hurtle by!
"Pfist! Pfist!! Me-pfiist!!!"

We prize the cat for his honest work,
On the rakish woodshed top;
Nor e'er a note does the tom-cat shirk
While divers weapons drop!
"Yeow! Pfist!! M-ey-o-w!!!"

We laud the cat, the Thomas-cat,
In the tangled garden patch;
He yowls with zest, and he standeth pat
To back his yowl with scratch!
"Y-e-o-w! P-f-i-s-t!! M-e-y-o-w!!!"

—Western Publisher.

NEW PATENTS.



765,163—Wrench Construction. D. Booker, Hamilton, Ga.

765,190—Wire Stretcher and Splicer. George F. Moyers, Carlisle, Iowa.

765,208—Carpenter's Folding Square. William Steers, Sr., Chicago, Ill.

765,222—Reamer. Charles A. Ast, Lake, Wis.

765,223—Ladder. Alfred A. Bayless, Frankfort, Ind.

765,246—Nail or Spike Extractor. Peter Muir, Sutherland, Neb

765,270—Air-Gun. William J. Burrows, Plymouth, Mich.

765,285—Pocket-Knife. E. Kaufmann, Solingen, Germany.

765,294—Hacksaw. Hugh A. Mosher, Dubois, Pa., and Edward E. Free, Ithaca, N. Y.

765,302—Screw driver. G. E. Wood, Southington, Conn.

765,308—Ratchet-Drill. Lyman M. Cooper, Owosso, Mich.

765,309—Stove. John E. T. Dickinson, Beatrice, Neb.

765,314—Window-Cleaner. Henry A. Hayden, Jersey City, N. J.

765,321—Level and Plumb. William Potter, New York,

765,328—Fence-Tool. Isaac Stripe, Aultman, Ohio.

765,338—Water-Heater. Alexander D. Gordon, Buffalo,

765,372—Combined Spring and Lock Hinge. William F. Bading, Grand Haven, Mich.

765,396—Door-Check. Franklin G. Neuberth, Waterville, Conn.

765,416—Heating-Drum. Reinhold C. Doenitz, Iron River, Mich.

765,423—Heating and Ventilating Apparatus. Ernst Glantzberg, Springfield, Mass.

765,411—Kettle. Lillie J. Alvord, Bedford, Iowa.

765,450—Can-Opener. Frank White and Fred Winkler, Newark, N. J.

765,474—Sectional Steel Square. John W. Gibbs, Whitsett, Pa.

765,491—Recoil-Operated Firearm. Rudolf H. Kjellman, Stockholm, Sweden.

765,492—Lawn-Mower Sharpener. George L. Knowlton, Philadelphia, Pa.

765,506—Rule-gage. Harper McKechnie, North Seattle, Wash.

765,511—Milk-Pail Attachment. Millard F. Potter, Albert Lea, Minn.

765,514—Clothes-Wringer. Carl Schmidt, Tegel, near Berlin, Germany.

765,527—Screw-Cutting Stock and Die. John Vorbach, Renwicktown, Marlborough, New Zealand.

765,539—Blind Lock. Robert H. Ashmore, Jefferson City, Tenn.

765,569—Wrench. Alfred G. Ely, New York, N. Y.

765,583—Pipe-Wrench. Claude F. Leavitt, Boston, Mass.

765,589—Wrench. Robert Nolen, St. Louis, Mo.

765,593—Latch. William Petersen, Lyons, Iowa.

765,633—Broom-Holder. Charles E. Pope, Holyoke, Mass.

765,642—Pick. George Tippett, Whatcheer, Iowa.

765,651—Water-Heating Apparatus. Peter Deasy, Oakland, Cal.

765,652—Water-Heating Apparatus. Peter A. Deasy, Oakland, Cal.

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Post Hole Augers.
Iwan Bros 58

Potash.
Roberts Chemical Co. 16

Pruning Shears.
Cronk & Carrier Mfg. Co 65

Pumps.
Beckman Bros. 62

Punches.
American Lock Nut Co 51
Geo. C. Keene & Co 56
Niagara Machine & Tool Wks 56
H. Weiss & Co. 56

Radiators.
Hart & Crouse Co 15

Radiators—Stove Pipe.
Wilmot-Castle Co. 18

Rain Water Cut Offs.
Cooney & Geiger 58

Rasps.
G. & H. Barnett Co. 1
Disston, Henry & Sons 66

Registers.
Auer Register & Mfg. Co. 19
Chicago Furnace Supply Co. 17
Excels or Steel Furnace Co. 21
Ferrosteel Co. 21
C. H. Foster 20
Henry & Scheible Co. 16
L. J. Mueller Furnace Co. 12
Roberts Heating & Ventilating Co 14
R. J. Schwab & Sons Co 17
Stockhoff Supply Co 21
Stowell Mfg & Fdy. Co 20

Rifles.
Lee-Glass-Andreesen Hardware Co. 59
J. Stevens Arms & Tool Co 68

Rivets.
Atlas Bolt & Screw Co 1
Plume & Atwood Mfg. Co. 57

Roofing—Iron and Steel.
American Sheet & Tin Plate Co 58
Berger Mfg. Co. 58
W. J. Burton Co. 58
Canton Steel Roofing Co. 55
Cortright Metal Roofing Co. 56
Follansbee Bros. Co. 55
Friedley & Voshardt 55
Garry Iron & Steel Co. 57
Kanneberg Roofing & Ceiling Co. 58
Milwaukee Corrugating Co. 55
Montross Roofing Co. 50

Roofing Cement.
Wm. Connors Paint Mfg. Co. 1
Garry Iron & Steel Co 57

Roof Paint.
Wm. Connors Paint Mfg. Co. 1
Joseph Dixon Crucible Co. 50
Garry Iron & Steel Co. 57

Rules.
Lufkin Rule Co. 64
Stanley Rule & Level Co. 64

Sad Irons.
Blacklock Foundry 63
Enterprise Mfg. Co. of Pa. 66

Sash Balances.
Pullman Mfg. Co. 62

Saws.
E. C. Atkins & Co 68
Henry Disston & Sons 66

Saw Sets.
E. C. Atkins & Co. 68
Henry Disston & Sons 66
Smith & Hemenway Co. 63

Scales.
Beckman Bros. 62
Osgood Scale Co. 68
Pelouze Scale & Mfg. Co. 51

Screws.
Atlas Bolt & Screw Co. 1
Columbus Bolt Works 1
Sandusky Tool Co 64

Screw Drivers.
Hurwood Mfg. Co 51
North Bros. Mfg. Co. 62
Smith & Hemenway Co. 63

Shears.
Geo. C. Keene & Co 56
Niagara Machine & Tool Works 56
H. Weiss & Co. 56

Sheet Metal Architectural Ornaments.
Friedley & Voshardt 55
Kanneberg Roofing & Ceiling Co. 58
Sheet Metal Specialty Co. 56

Sheet Metal Specialties.
Globe Machine & Stamping Co. 63
Sheet Metal Specialty Co. 56

Shelf-Brackets.
Atlas Mfg. Co. 68

Shot Guns.
Lee-Glass-Andreesen Hdw. Co. 59
Stevens Arms & Tool Co. 68

Shovels.
Avery Stamping Co. 61
Star Shovel & Range Co 49

Sifters.
Hill Dryer Co. 62
Stuber & Kuck 64

Skylight Gearing.
H. Weiss & Co 56

Skylights.
Galesburg Cornice Works 64
Jones Skylight Works 50
Sheet Metal Specialty Co. 56

Slates and Slaters' Tools
E. J. Johnson & Co 56
O'Halloran & Jacobs 56

Squares, Machinists'.
Henry Disston & Sons 66
Stanley Rule & Level Co. 64

Stampings—Sheet Metal.
Globe Machine & Stamping Co. 63

Staples.
Titchener & Co 60

Steel Ranges.
Art Stove Co. 4
Ashland Steel Range & Mfg. Co. 8
Auer Register & Mfg. Co. 19
Beckwith, Estate of P. D. 22
Bergstrom Bros. & Co 18
Chicago Stove Works 19
Foster Stove Co 19
Gem City Stove Co. 8
Germer Stove Co 11
Joliet Stove Works 9
John Kontny 10
Pittsburgh Stove & Range Co. 2
Portsmouth Stove and Range Co. 2
Wm. Resor & Co. 7
Ringen Stove Co 3
Star Shovel & Range Co. 12
Toledo Stove & Range Co. 5

Stoves.
Art Stove Co. 4
Ashland Steel Range & Mfg. Co. 8
Beckwith, Estate of P. D. 22
Bergstrom Bros. & Co. 18
Chicago Stove Works 19
Foster Stove Co 19
Gem City Stove Co 8
Germer Stove Co 11
Joliet Stove Works 9
John Kontny 10
Marion Stove Co 9
Marion Stove Co 52
Pittsburgh Stove & Range Co 2
Portsmouth Stove & Range Co. 2
Wm. Resor & Co 7
Star Shovel & Range Co. 12
Toledo Stove & Range Co. 5
White Stove Co 6

Stoves—Gas.
Ashland Steel Range & Mfg. Co. 8
Pittsburgh Stove & Range Co. 2
Wilmot-Castle Co 18

Stoves—Gasoline.
Ringen Stove Co. 3

Stoves—Oil.
National Enameling & Stamping Co 67
Ringen Stove Co 3
Silver & Co. 51

Stove Boards.
Sweeney Mfg Co 53

Stove Cement.
Jos. Dixon Crucible Co. 50

Stove Clay.
Bridgeport Crucible Co. 68

Stove Mats.
Stuber & Kuck 64

Stove Patterns.
Geo. W. Cope, Pattern Works 52
Mansfield Stove Pattern Works 52
Milwaukee Pattern Works 52
Vedder Pattern Works 52
Weller Pattern Co 52

Stove Polish.
Nickel Plate Stove Polish Co. 16

Stove Repairs.
American Stove Repair Wks 52
A. G Brauer 52
Wm. T. Dust Co. 52
Great Western Stove Repair Co. 52
S. M. Howes Co. 52

Sugar Kettles.
Blacklock Foundry 63
Sperry & Co. 62

Tapes
Lufkin Rule Co. 64

Thermometers—Oven.
Evans Stamping & Plating Co. 53

Tinners' Furnaces.
Clayton & Lambert Mfg. Co. 57

Tinners' Tools.
Niagara Machine & Tool Works 56
H. Weiss & Co. 56

Tinplate.
American Sheet & Tin Plate Co. 58
Berger Mfg. Co 58
Canton Steel Roofing Co. 55
J. H. Eller & Co. 57
Follansbee Bros, Co. 55
Garry Iron & Steel Co. 57
Illinois Roofing & Supply Co. 68
Lee-Glass-Andreesen Hdw. Co. 59
McClure Co. 68
Milwaukee Corrugating Co. 55
Stockhoff Supply Co. 21

Tinware.
Hill Dryer Co. 62
Lalance & Grosjean Mfg. Co 67
P. Moshiek 55
National Enam. & Stamping Co. 67
Stuber & Kuck 64

Trowels.
Avery Stamping Co 64
H. Disston & Sons 66

Tubing.
Benedict & Burnham Brass and Copper Co 57

Tumbling Barrels.
Globe Machine & Stamping Co 63

Ventilators.
Crown Ventilator Co 49
Friedley & Voshardt 55
Globe Ventilator Co. 68
Iwan Bros 58
Powers Bros. 1
Sheet Metal Specialty Co 56

Wagons.
Sycamore Wagon Works 50

Wagon Brackets.
Norris & Loring Hdw. Co. 50
J. T. Swan 60

Wash Boilers.
P. Moshiek 55
Stuber & Kuck 64

Washing Machines.
H. F. Brammer Mfg. Co. 60
Clark, Quien & Morse 55
J. M. Gagan & Co 60
"1900" Wasner Co 59
Quincy Washing Machine Co 61
White Lily Washer Co 60

Weather Strips.
Norris & Loring Hdw. Co. 50

Wire Fence.
Denning Fence Works 62
F. D. Kees 60
Chas. A. Van Pelt 65

Wire Goods.
Denning Fence Works 62
Titchener & Co 60
Chas. A. Van Pelt 65
Wire Novelty Co 51

Wrenches.
Hawkeye Wrench Co. 63

Trade Report.

CHICAGO IRON MARKET.

The upward tendency of the last four weeks continues. Markets on the whole are perceptibly stronger than last week, though prices remain almost unchanged. Demand for finished material is somewhat limited. The local iron market is more active. The deadlock between buyers and sellers is a matter of delivery rather than price. Sellers are holding off for deliveries extending into 1905 at the present scale, and asking premiums of from 25c to 50c per ton for future deliveries.

Contracts of heavy tonnage for Northern irons were let last week. The minimum price was $13.25, Chicago, for No. 2. Southern irons are very firm at $9.25, Birmingham, for No. 2. Foundry men are buying very freely. Malleable iron is active and strong.

Standard 72-hour Connellsville and Southern foundry cokes are quoted at from $1.90 to $2 at the ovens. Connellsville is selling here at from $4.55 to $4.65. Southern cokes are from $4.30 to $4.40.

Steel billets, rails, bars, and hoops are meeting with a decided welcome abroad. In June 42,000 tons of these commodities were exported as against 36,000 tons in May, and 30,000 tons in April. The prices at which these goods were sold abroad are said to be much lower than they are to be had in this country.

The total production of pig iron during the first six months of 1904 was 8,173,438 tons. Unsold stocks on the market June 30th were 623,254 tons. At this time over 200 furnaces were in operation.

OLD MATERIAL.

Prices have an advancing tendency, but are so unsteady as hardly to admit of definite deductions. Railroads are holding on to their supply for the most part, though the St. Paul road is offering 3,500 tons. The consumption is not so great as prices indicate. Speculators are buying heavily. Railroads are obtaining an advanced scale from this source. We quote dealers' selling prices, gross tons, as follows: Old iron rails, $14.50 to $15.00; old steel rails (4 feet and over), $11.00 to $11.50; old steel rails (less than 4 feet), $10.00 to $10.50; relaying rails, subject to inspection, $22.50 to $23.00; relaying rails for sidetracks, $18.00 to $20.00; old wheels, $11.00 to $11.50; heavy melting steel, $9.50 to $10.00; mixed country steel, $7.00 to $7.50.

CHICAGO HARDWARE SCRAPS.

Though the call for hot-weather goods has not subsided by any means, jobbers are experiencing a steady inquiry for winter staples, as skates, snow-shovels, sleds, etc. Builders' hardware is showing up better and prices on this line are on the upturn. Wire and cut nails seem to have reached rock-bottom prices. Cut nails, particularly, are in greater demand. A rather heavy buying movement of the last week advanced prices about 5c per keg. The new cut-nail price schedule is not, however, the official quotation, buyers realizing the splendid opportunity are taking advantage of the exceptional rates and are buying wire goods in abundance. There is every prospect that, when hardware statistics for the past month are brought to light, the sales will comfortably exceed those of the corresponding month last year.

Dun & Co. report officially 6,214 commercial insolvencies for the first half of 1904, with a sum total indebtedness of $79,490,000. In the same period last year, there were 5,628 failures, with liabilities of $66,797,000. We believe that these figures are not forboding. The hard-times-every-tenth-year prophet has had his prediction realized to a certain extent. There is every reason to predict that the dreaded season is now over. The crop prospects are gratifying. Neither manufacturers, jobbers or retailers are overstocked. There are rosy reports from all over the country, forcasting a heavy business for next fall.

Hardware prices are at about the same general level as two weeks ago. Brown's animal pokes are listed at from $5.00 to $6.00 per doz. White enameled ware is at a discount of 50, 10 and 5 per cent. King's barn-door hangers have fallen 75c. Jobbers now sell at $5.75 per doz. pairs. Parker's oval slide vises are selling at a discount of 50, 4, 2½ per cent and 50, 10, 5, 2½ per cent.

AXES.

Axes have risen in some cases and fallen in others. The general level remains about the same. We quote Chicago jobbing prices as follows:

Handled (3 lbs. to 4 lbs.)—	Per doz.
Gladstone	$11.25
Hunt's	9.50
Lippincott's	9.50
Pioneer	10.25
U. S. A.	12.50
Valley Forge	9.50
Maricopa	8.25

Single Bitted (Without Handles, 3 lbs. to 4 lbs.)—	Per doz.
Gladstone	$ 8.50
Hubbards Concave	7.00
Hunt's	7.00
Lippincott's	7.00
Mann's	7.00
Pioneer	7.50
U. S. A.	9.00
Valley Forge	7.00
Second Quality	7.00
Maricopa	6.25

Double Bitted (Without Handles, 3 lbs. to 4 lbs.)—	Per doz.
Lippincott's	$ 9.00
Mann's	9.00
Pioneer	9.50
U. S. A.	11.25
Valley Forge	9.00

The above prices on axes from 3 lbs. to 4 lbs. are the base prices.

For 3½ to 4½ lbs, advance the base price..... 25c
For 4 lbs. to 5 lbs. advance the base price 50c
For 4½ to 5½ lbs. advance the base price..... 75c

WRINGERS.

There has been a sharp advance in clothes wringers. Jobbers quote as follows:

No. 22 Guarantee	$28.50
No. 110 Guarantee	29.50
No. 110 Brighton	21.50
No. 22 Pioneer	20.50
No. 2 Superb	19.50
No. 730 Easy	26.00
No. D-110 Domestic	25.50
No. E-350 Empress	28.50
No. 122 Bicycle Ball-Bearing	31.50
No. 122 Swan	27.50

TWINE.

Twine has fallen 1c. We have revised our schedule and quote as follows:

Seine—	6.	9.	12.	15 and larger.
Soft, per lb.	25c	24c	23½c	23c
Med, per lb.		24c	23½c	23c
Hard, per lb.		27c	25½c	24½c

Staging—

¼ lb. Ball, Size No. 21, per lb.	23c
¼ lb. Ball, Size No. 24, per lb.	23c
¼ lb. Ball, Size No. 27, per lb.	22c

HINGES.

Chicago jobbers have reduced screw, hook and strap hinges 15c, and quote as follows:

6 in. to 12 in., per 100 lbs.	$3.50
14 in. to 20 in., per 100 lbs.	3.25
22 in. to 36 in., per 100 lbs.	3.00

GLASS.

The principal window-glass jobbers of the United States held a meeting in Chicago last Tuesday and decided to advance the price schedule from 5 to 7½ per cent. Moreover, it was decided that within thirty days, the price shall be advanced 10 per cent more. It was claimed that for over a year jobbers have been selling at a loss. The small amount of building of the last year or so resulted in a dearth of orders for glass. This brought about a jobbers' price-war, which has been carried on for the past nine months. Work on new buildings has been progressing satisfactorily lately, with few labor troubles. The demand for window-glass is quite brisk and jobbers feel that the time is now ripe for an advance. Last week a contract was closed for 300,000 boxes to cost about $1,000,000. This deal will exhaust almost all the available supply in the country and place the glass jobbers in commanding position.

COPPER.

Ingot copper is quiet and unchanged, with Lake quoted at 12⅝@12⅞c; electrolytic, 12⅝@12¾c; casting, 12⅜@12½c. The London closing was cabled quiet: Standard copper, spot, £57 5s; futures, £57 3s 9d.

The Copper Manufacturers' Association quotes manufactured copper steady and unchanged on a basis of 18c per lb. for sheets and bars. Yellow sheathing material is quoted on a basis of 15c.

PIG TIN.

The market for pig tin has fluctuated sharply of late, yesterday's closing being weak and lower. There has been a substantial advance for the week, both in London and New York. The London market was steady yesterday at £121 15s for spot, and £121 15s for futures. The New York quotation was 26.75@26.90c for July and 26.72½@26.90c for August. The jobbing price is 26½@26¾c.

TIN PLATES.

Tin plates are steady at the following prices: Melyn, $6@6.50; Alloways, $5.25@5.75; coke, $4.87½@6.50; ternes, $4.50@7; additional X, $1.50@1.75 more.

LEAD.

The trade received a surprise Monday when the American Smelting & Refining Company announced a decline of 10 points in prices of pig lead. The new quotations are 4.10c for 50-ton lots in New York, and 4.17½c for 25-ton lots, both for future shipment. In New York the market is easy, with spot quoted at 4.20@4.25c. St. Louis is dull at 4c. The jobbing price is 4¾@5c, according to quantity. The London quotation is £11 13s.

Manufactured lead is firm at: Lead pipe, 6¾c; sheet, 8¼c; tin pipe, 50c; tin-lined pipe, 12½c; old lead in exchange, 3¾c; tea lead, 3¼c.

SPELTER.

Spelter is firm and unchanged: Round lots, New York, 4.85@4.95c for spot and futures; jobbing, 5⅜@5½c.

ZINC.

Sheet zinc, cask lots, 6¼c; small lots, 7¼c; St. Louis is steady at 4.75c; London, £22 7s 6d.

ANTIMONY.

Antimony is dull and easy: Round lots, New York: Cookson's, 7@7½c; Hallet's, 7@7¼c; United States, 6@6¼c; Italian, French and Japanese, 6@6¼c.

NICKEL.

Nickel, 40@47c for large lots, and 50@60c for small lots.

QUICKSILVER.

Quicksilver, New York, $42 per flask for large lots; small orders, $43; San Francisco, $43, domestic orders; for export, $41; London, £1 17s 6d.

ALUMINUM.

Aluminum, No. 1 ingot, 33c per lb.; No. 2, 31c.

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x14	$10 25
IC	14x20	6 75
IX	14x20	8 00
IXX	14x20	9 20
IXXX	14x20	11 60
IXXXX	14x20	12 85
IC	20x28	13 50
IX	20x28	16 00
IXX	20x28	18 40
IXXX	20x28	20 80
IXXXX	20x28	23 20

COKE PLATES.

Cokes, 180 lbs	IC	20x28	8 50
Cokes, 200 lbs	IC	20x28	8 80
Cokes, 216 lbs	IC	20x28	9 10
Cokes, 216 lbs	IX	20x28	11 10

PIG IRON.

Lake Sup. Charcoal	$14 50@$15 00
Local Coke Fdy No. 1	13 75@ 14 00
Local Coke Fdy No. 2	13 25@ 13 50
Local Coke Fdy No. 3	12 75@ 13 00
Local Scotch Fdy No. 1	14 50@ 15 00
Ohio Strong Softeners, No. 1	14 50@ 15 00
Southern Silvery	14 85@ 15 85
Southern Coke No. 1	13 40@ 13 65
Southern Coke No. 2	12 90@ 13 15
Southern Coke No. 3	12 65@ 12 90
Southern Coke No. 4	12 40@ 12 65
Southern No. 1 Soft	13 40@ 13 65
Southern No. 2 Soft	12 90@ 13 15
Alabama Car Wheel	18 85@ 19 35
Malleable Bessemer	13 50@ 14 00
Jackson Co. Silvery	17 80@ 18 30

BLACK SHEET STEEL.

No. 16 per 100 lbs.	$2 40
No. 18-20 per 100 lbs.	2 45
No. 22-24 per 100 lbs.	2 50
No. 25-26 per 100 lbs.	2 55
No. 27 per 100 lbs.	2 60
No. 28 per 100 lbs.	2 70
No. 29 per 100 lbs.	2 90

POLISHED SHEET STEEL.

No. 24 per 100 lbs.	$4.85
No. 26 " "	$5.95
No. 27 " "	$5.05
No. 28 " "	$5.15

SMOOTH STEEL.

Wood's Smooth	No. 15-17	2 85
" "	No. 18	2 95
" "	No. 20	2 80
" "	No. 22-24	2 90
" "	No. 25-26	3 00
" "	No. 27	3 10
" "	No. 28	3 20

PATENT PLANISHED SHEET STEEL.

Patent Planished Sheet Steel. "A" $10 20, "B" $9 20

GALVANIZED IRON

No. 16 (regular sizes) per 100 lbs.	$2 80
Nos. 18 & 20, per 100 lbs.	2 95
Nos. 22 & 24, per 100 lbs.	3 10
No. 26, per 100 lbs.	3 30
No. 27, per 100 lbs.	3 50
No. 28, per 100 lbs.	3 70
No. 30, per 100 lbs.	4 60
Nos. 22 & 24 x 36 in., per 100 lbs.	3 30
No. 26 x 36 in., per 100 lbs.	3 50
No. 27 x 36 in., per 100 lbs.	3 70
No. 28 x 36 in., per 100 lbs.	3 90

SOLDER.

XXX Guaranteed ½&½, per lb.	20¼c
Commercial ½&½, per lb.	19 c
No. 1 Plumbers	17¾c

SHEET ZINC.

600 lb. Casks, base, per cwt.	$6.25
300 lb. Casks, per cwt.	6.45
Sheets, per cwt.	6.50

COPPER.

Copper, base, 21c

TIN PIGS AND BARS.

Banca, pigs, per lb	35@35½c
Straits pigs, per lb	35c
Straits in bars, per lb	37c

LEAD.

American Pig	$4 60@4 62½c
Bar	6¼
National (White) brands (in less than 100 lb. lots) per lb.	7½

Sheet.

Full coils per 100 lbs.	$6.75
Cut " " " "	7.25

HARDWARE.

ADZES.

Carpenters'.

Ajax	35&10%
Blood's	40&10%
Hunt's	25%
White's	12½%

Coopers'.

Barton's	20%
White's	15%

Ship.

Ajax	33⅓%
Blood's	37½%
Hunt's	25%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F L Waterproof, 1-10s	40c
G D	35c
Eley's	52c

Cartridges.

Peters Rim Fire Ctgs	50&3%
Peters Cent Fire, Pistol & Rifle	25&3%
Peters Cent Fire, Military and Sporting Ctgs	15&8%
Peters Blank Ctgs, except 22 and 32, an additional 10% from above discount.	
Peters Blank Ctgs. 22 cal.	$1 18
Peters Blank Ctgs. 32 cal., C. F.	4 40
Peters B B Caps, Round ball	$1 44
Peters B B Caps, Conical ball	$1 85
Winchester Cent. Fire, Military and Sporting Ctgs	15&8%
U. M. C. B B Caps, Con. Ball	$1 85 net
U. M. C. Rim Fire Shot Ctgs.	50&15&3%
U. M. C. Cent. " " "	25&15&3%

Primers.

Berdan Primers	$1 00
Peters Primers	1 20
Winchester Primers	1 20

Shells.

Peters Empty Paper Shells, 10 and 12 gauge. League	25&2%
Peters Empty Paper Shells, 16 gauge. League	20&2%
Peters New Victor Nitro Shls.	20&2%
Ideal	25&7%
Peters Loaded Shells. League and Referee Semi-Smokeless	40&1%
Peters New Victor Loaded Shells with King's Smokeless	40&6%
Ideals Loaded with King's Smokeless	40&10&10&1%
Winchester Blue Rivals	40&1%
Winchester Yellow Rivals	40&1%
Winchester Repeater	20&2%
Winchester Leader	40&6%
U. M. C. Loaded Shells, Black Powder	40&1% full cases
Winchester Loaded Shells, Black Powder	40&1% full cases

Gun Wads—per 1,000.

Peters Gun Wads	18%
U. M. C. Gun Wads	18%

Powder.		Each
King's Smokeless, kegs		$11 30
" "	½ kegs	5 80
" "	¼ kegs	2 97
" "	1-lb. cans	51
" "	1-lb. " rifle	70
Dupont's "	50-lb. drum	22 45
" "	25-lb. kegs	11 30
" "	12½-lb. kegs	5 80
" "	6¼-lb. kegs	2 97
" "	1-lb. cans	51

Shot.

Dropshot, sizes smaller than B, 25-lb. bags, per bag	$1 60
Drop shot, B and larger sizes, 25-lb. bags, per bag	1 85
Buck Shot, 25-lb. bags, per bag	1 85
Chilled Shot, 25-lb. bags, per bag	1 85

ANVILS.

Trenton, 70 to 80 lbs	9¾c per lb
Trenton, 81 to 150 lbs	9c per lb

AUGERS.

Boring Machine	60&10&5%
Irwin's	40&10%
Carpenters' Nut	60&10&5%
Hollow: Ives' New Pattern	25%
Bonney's—list $30.00	75&5%
Stearn's, No. 1 *doz.*	$42 00
Stearn's, No. 3 "	33 50
Post Hole.	
Dalbey, 8-inch per doz.	$ 5 75
Digwell, 8-inch "	13 00
Howe's, 6 and 8-inch "	11 00
Iwan's Improved	40 & 5%
Vaughan's, 4 to 9-inch per doz.	6 50
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or without screw,	40-5%
Snell's, " " " "	40-5%

AWLS.

Brad, handled per doz.		$0 28
shouldered, ass'd, 1 to 4 per gr.		95
patent, asst'd, 1 to 4	"	90
Harness, common	"	1 10
patent	"	90
Peg, shouldered	"	95
patent	"	40
Scratch, No. 2, handled	"	4 40
No. 1, socket handled per doz.		1 15
No. 20 Hurwood	"	2 00
Sewing, common per gr.		90
patent	"	90

AXES.

Boys', Handled:	
Camp Fire, 3-lb., per doz	$6 25
" " 4-lb., freighters', per doz	7 85
Cast Steel, good grade, pr. dz.	5 80
Pioneer, per doz	7 00
Broad:	
Peerless	40&5%
Red Warrior, per doz	$27 00
Firemen's, per doz	1 50
Handled:	
Gladstone, 3 to 4 lbs, per doz.	$11 25
Hunt's " " "	9 50
Lippincott's " " "	9 50
Pioneer " " "	10 25
U. S. A. " " "	12 50
Valley Forge " " "	9 50
Maricopa " " "	8 25
Single Bitted (without handles)	
Gladstone, per doz 3 to 4 lbs	$8 50
Hubbard's conc. " "	7 00
Hunt's " "	7 00
Lippincott's " "	7 00
Mann's " "	7 00
Pioneer " "	7 50
U. S. A. " "	9 00
Valley Forge " "	7 00
Second Quality " "	7 00
Maricopa " "	6 25
Double Bitted (without handles):	
Lippincott's 3 to 4 lbs per doz	$9 00
Mann's " " "	9 00
Pioneer " " "	9 50
U. S. A. " " "	11 25
Valley Forge " " "	9 00

The above price on axes of 3 to 4 lbs. are the base prices.
3½ to 4½ lbs. advance 25c.
4 to 5 lbs. advance 50c.
4½ to 5½ lb. advance 75c.

BALANCES, SPRING.

Frary's	50%
Pelouze	20%

BAGS, PAPER NAIL.

Pounds..	3	5	10	16	20	25
Per 1,000.	$1 60	1 85	2 60	3 40	3 90	4 75

BARS, CROW.

Pinch or Wedge Point cwt. $2 95

BASKETS.

Galvanized Iron—	½ Bu	1 Bu	1½ Bu
Per Doz	$4 00	5 50	7 00

BEAMS—SCALE.

P. S. & W. Co. 40%

BEATERS.

Carpet, Rattan per doz	$2 40
Raymond's Steel Wire, " "	80
Woven Wire, No. 4 " "	1 10
Egg.	
Dover Pattern per doz.	$0 70
Genuine Dover "	0 90
Mammoth Dover "	1 75
Lightning "	0 84
Lyon's (standard size) "	1 75
Whip, French "	1 35
Spiral "	0 40
Spoon "	0 40
Surprise per gro.	1 45

BELLOWS.

Blacksmiths'	70&5%
Hand, 8 in. per doz.	$ 6 85
10 in. "	8 40
Molders', 12 in. per doz.	13 00

BELLS.

Call.	
2¾ in. nickeled bell per doz.	$ 1 35
2¾ in. " brass bell "	3 60
3 in. " " " "	7 50
3 in. " silver alloy bell, per doz.	16 50
4½ in. " brass bell and base per doz.	14 50
Cow.	
Ordinary Goods	70&5%
High Grade	60&10%
Jersey	70&10%
Door.	
Bigelow Automatic per doz.	$9 50
Rotary.	
3 in. bronzed iron bell "	5 25
3 in. nickeled " " "	7 50
3½ in. " " " "	9 00
Hand.	
Hand Bells, Polished	60@60&10%
White Metal	50%
Nickel Plated	40%
Swiss	60&5%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, Steel Alloy, 50, 10 & 5%	
Farm, lbs... 40 50 75 100	
Each. $1 10 $1 30 $1 85 $2 65	

BEVELS—TEE.

Stanley's, rosewood handle, new list	40&5%
Stanley's Iron handle	40&5%

BINDING—OIL CLOTH.

Zinc	75, & 10%
Brass	75%
Brass Plated	75 & 10%

Auger. BITS.

Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Ford's	40&5%
Ford's Ship	40&5%
Irwin	45%
New Jenning's	50, 10&10%
Russell Jenning's	25&10%
Clark's Expansive	50, 10&5%
Steer's " Small new list	$22.00
Irwin Car	45%
Snell's Car	60&5%
" Ship	40&5%
Ford's " Auger Pattern Car	40&5%
Center	40&10%
Countersink—	
Wheeler's per doz.	$1 30
American Snail Head "	0 70
" Rose " "	0 80
" Flat "	0 70
Buck Bros'. Flat "	2 60
German "	0 70
Dowel, New Jennings	40&10%
Gimlet—	
Standard Double Cut	50&5@50&10%
German Pattern per doz.	$0 45
Gouge "	0 80
Spoon "	0 80
Countersink "	1 20
Reamer—	
Buck Bros.' ½ Round. "	2 75
" " Square "	2 50
Standard ½ Round "	0 75
" Square "	0 75
German Octagon "	0 75
Screw Driver—	
Round Shank "	0 45
" " extra quality "	1 40
Square Shank "	1 10

BLACKING—STOVE (See Polish.)

BLADES—SAW.

Butchers'—	
Standard ¾ & 1¼ in	60&5%
Clock Spring	60&5%
Star	20%
Hack—	
Disston's	35&5%
Griffin's	35&5%
Star	20%
Wood—	
Jackson's per doz.	$2 25
Disston's—No. 6, 16, 26 & 045, $4 20; No. 11, $6.30.	
W. M. & Co.'s No. 20 per doz.	$5 50

Snatch— BLOCKS.

Wooden	55&10%
Steel	40&10%
Tackle—	
Wooden	70&5%
Steel	50, 10&5%

BOARDS.

Stove	40%
Wash—	
Anchor per doz.	$1 60
Globe "	2 10
Banner "	2 60
Crystal "	3 15
Brass King "	3 15
Nickel Plate "	3 15
Enamel King "	3 15

BOBS—PLUMB.

Carpenters', 8½ oz. iron pr dz.	$0 65
1½ lb. " " "	1 60
2¾ lb. " " "	1 80
13 oz. lead "	2 00
6½ oz. brass "	3 20
Mason's 3 lb. lead "	4 00

BOILERS—FARM.

Profit	30&5%
Solo	35&5%

BOLTS.

Carriage, Machine, Etc.	
Carriage, ⅝x6 and sizes smaller and shorter	75%
Carriage, sizes larger and longer than ⅝x6	70@10%
Machine, ⅝x4 and sizes smaller and shorter	75&5%
Machine, sizes larger and longer than ⅝x4	75%
Elevator	50-10&5%
Plow	60&5%
Stove	80%
Tire	72½&5%
Wagon Box Strap	70&10%
Mortise Door—	
Gem	50-10&5%
Ives'	50&10%
Barrel—	
Cast	50%
Wrought	50&5%
" Bronzed	75&5%
Flush, Wrought, B. K.	40&5%
Spring—	
Wrought	75&10%
" Brass	75&10%
Square—	
Cast	40%
Wrought	60-10&10%

BORERS.

Angular, Miller's Falls, per doz	$13 75
Bung, Common Ring with Handle—	
Inches 1¼ 1¾ 2	
Per doz $6 00 6 90 8 1	

BORERS—CONTINUED.

Enterprise Mfg. Co., No. 1 List $1.50; No. 2, $2.00 each....25-10&5%

BOXES.

Mail, No..... 5 10 20
Per doz.....$3 65 10 50 13 00
Mitre—
New Langdon.....15&5%
Olmsted's 15%
Stanley's.....30%
Seavey's.....per doz 8 00
Twine, Nos... 20 30 25 121
Per doz $1 50

BRACES.

Common Ball.....$1 35@1 45
Barbers' Pattern .....50&10%
Fray's Gen. Spofford's.....50&10%
" No. 66 to 146.....50&10&7½%
P. S. & W. Co.'s Peck's Adjustable.....50-10&5%

BRACKETS.

Hay-Rack, Wenzelmann's No. 1, $12.60; No. 2, $13.20 per doz.
Shelf—
Cast Iron, Japanned.....50, 10, 10%
Stanley's Wrought Steel..... 70-10&2½%
Wire.....75-10&5%

BROILERS.

Wire .....70&10%
Crown, Self-Basting, No.80..doz. $2 90

BUCKETS.

Pump Rubber—
Wychoff.....per gr. $4 75
Cooper..... " 5 50
Champion ..... " 7 50
Victor ..... " 9 50
Star..... " 5 00
IXL... ..... " 6 75
Well—
Galv'd Qts..... 10 12 14
Per doz $2 75 3 00 3 25
Wooden, top ea., plain, per doz 3 60
" " swivel " 4 85
" side-strap, plain " 3 70
" " swivel " 5 00

BUCKS, SAW.

Folding .....per doz $2 10

BURS, RIVETING.

Copper Burs Only.....35-10&5%
Tinners' Iron Burs Only.....70%

BUTTS.

Cast-Iron.....65&10%
Wrought Brass.....20%
Wrought Steel Bright—
Nos. 800, 804, 808, 810, 814 and 834 ..... 75&10%
Nos. 838, 840 and 842 .....75-10&10%
Nos. 823 and 833.....80-20&10%
Wrought Steel, Japanned—
Nos. 731 and 727.....70&10&10%

CALIPERS.

Double .....40&10%
Inside and Outside.....40&10%
Wing.-.....40&5%

CALKS.

Logger's Boot,(Lufkin R. Co's.) .....per M $3 65
Toe.
Shoenberger.....per lb. 5c
Bessemer ..... " 5½c
American ..... " 7½c
Swedes..... " 8½c

CANS.

Cheese Factory Can Stock—
Gallons.... 15 20 30 40
Per set....$3 40 $3 45 $3 70 $4 90
Milk
Elgin Pattern,
Nos..... .808, 810, 88.
Gal. 8 10 8
per doz....$21.50 $24.50 $23.10
New Elgin Pattern,
Nos. 105 108 110
Gal. each, 5 8 10
Per doz., $16.75 $18.50 $19.85
Iowa Pattern.
Nos. 608 610
Gal. 8 10
Per doz $20.50 $21.50
New York Pattern.
Nos. 908, 910,
Gal. each, 8 10
Per doz. $25.15 $26.95
Oil and Gasoline—
1 Gal. glass, Daisy....per doz. $1 95
1 " cushioned " 3 15
Star, gals..... 1 2 3
Per doz..... $1 35 $2 30 $3 15
Per doz.
Sterling Tilting....5 gallon... $8 00
"High C" Pump...5 " ... 12 00
Eureka Pump.....5 " ... 9 25
Wood Jacket.....50-10&10%

CAPS—GUN.

See Ammunition.

CARRIERS.

Hay—
Myers' Imperial.....each $3 50
" Clover Leaf..... " 3 50

CARTRIDGES.

See Ammunition.

CASTERS.

Acme—Ball Bearing.....35%
Bed.....60, 10&5%
Common Plate—
Brass wheel..... .....60&10%
Iron and porcelain wheel.60, 10&5%
Philadelphia Plate.....70&5%
Martin's.....40-10&5%
Payson's..... 70&10%
Tucker's—Wood &iron wheel..25&5%
" Rubber wheel..... 15%

CATCHERS—GRASS

Lieder's No. 1..... ...per doz, $6 25
Eureka..... ..... " 4 25
deal No. 4..... 50

CHAIN AND CHAINS.

Breast Chains—
Doubleslack.....doz. pairs $5 75
With Covert snaps " 5 00
" slide..... " 3 25
Without slide..... " 2 85
Bright Ox Chains—
5-16in. $5 65: ⅜ in. $5 40 per 100 lbs.
Cable Coil Chain—

Inch....	3-16	¼	5-16	⅜
Per 100 lbs...	$3 75	$6 15	$5 00	$4 25
Inch	7-16	½	⅝	¾
Per 100 lbs...	$4 05	$3 90	$3 80	$3 70
Inch	⅞	1	1¼	
Per 100 lbs....	$3 60	$3 60	$3 60	

Cable Log Chain—Advance 35c per 100 lbs. on Cable Coil.
Cow Tie Chains—
American 2 toggle..... 50%
" toggle and snap... 50%
" open and closed ring..... 50%
Halter Chains—
American, new list.....33⅓%
German.....60-10&5%
Niagara, new list.....40&5
Triumph " 30%
Picture Chains—
Light Brass, 3 ft.....per doz. 68c
Heavy " 3 " ..... " 75c
Pump Chain—Galvanized per 100 lbs..... $4 75
Safety Chain—Brass.....60&10%
Special Steel Loading Chain—

Inch	¼	9-32	5-16
Per 100 lbs.....	$16 00	$13 50	$12 50

Stretcher Chains—
5-16 in., $8.50—⅜ in., $7.75 per 100 lbs.
Tie-Out Chains—Browns.....70&10%
Trace Chains—Western Standard—
6½— 6-2.....per pair 27c
6½— 8-2..... " 31c
6½— 8-3..... " 30c
6½—10-3..... " 35c
7 — 8-2..... " 35c
7 —10-3..... " 39c
7 —10-1..... " 44c
7 —10-0..... " 55c
Add 2c per pair for Hooks.
" 2c " for Twist Link
Wagon Stay Chains—

Inch	¼	5-16	⅜
Per 100 lbs.	$6.50	$5.00	$5.50

CHALK-CARPENTERS'.

Blue.....per gross 58c
Red..... " 48c
White..... " 38c
Common White Sch'l Crayon..... " 5½c

CHARCOAL.

In barrels .....per bu. 21c

CHECKS-DOOR.

Blount 30%
Blum-Jap'd, $6.25; Brzd., doz... $7.00
Columbia.....50, 10&5%

CHIMNEY TOPS.

Iwan's Volcano.....50%

CHISELS.

Box—

Inches.....	10	12	14
Round....per doz.	$2.10	$2.25	$2.75
Flat.....per doz.	2.85	3.60	4.20

Cold—
Good quality.....per lb. 12@ 20c
U.S.A.,extra quality..per lb. 28c
Socket, Framing and Firmer—
Barton's..... 20%
P. S. & W. Co's..... 70%
For beveled back, add..per doz..... 60c
Tanged, Firmer—
P. S. & W. Co's.....35&5%
With Handles add... per doz. 60c
Choppers, Enterprise Meat—
No. 12.....$2 75
No. 22..... 4 50

CHUCKS-DRILL.

Standard Tool Co.'s 40%
Goodell's, for Goodell's Screw Drivers.....per doz. $6.25
Yankee, for Yankee Screw Drivers..... 5.00

CHURNS.

Anti-Bent Wood, Gal.. 5 7 10
Each $3.90 4.15 4.40
Belle, Barrel..... 70&5%
Common Dash, Gal.... 4 5 6
Per doz..... $7.75 8.50 10.50
Hero.....70%
Union, Gal..... 5 7 10
Each $3.65 3.90 4.75

CLAMPS

Adjustable—Martin's 40%
Carpenters'—Steel Bar..... 30%
Carriage Makers'—P. S. & W. Co.'s..... .....40, 10&5%
Hose—
Sherman's, brass, ¾ in., ... per doz. 33c
Double, brass, ¾ in...per doz. 65c
Saw Filers—
Disston's list, $30.00..... 30%
Stearn's, No. 0, $3.50, No. 1, $11.50, No. 3, $5.50 doz.
Wentworth's..... 40%

CLAWS-TACK.

Cast, wood hdle...per doz., 45@ 60c
Forged steel, wood handle .....per doz. 80c
Solid Steel.....per doz. $1.60
Giant.....per doz. .60

CLEANERS.

Drain—
Iwan's Adjustable.....50%
Iwan's Stationary.....40%
Pot--Wire.....per doz. $0.45
Side-Walk—Steel.....per doz. 3.15
XLCR.....65&5%

CLEAVERS.

Family—Ajax, In..... 6 7 8
Per doz $5.50 5.75 6.25

CLEVISES.

Malleable.....per lb. 3⅝c

CLIPPERS.

Bolt..... $1.90@4.75

CLIPS.

Axle.....65&5%
Damper—
Standard .....per doz. $0.70
Troy ..... " .38
Hame..... " .30

CLOTH.

Emery—
Ajax.....50&10%
B. & A.....50%
Hardware Wire--full rolls (100 ft.)
2 to 8 mesh black, per 100 sq. ft. $1.85
9 to 12 " " " " 2.15
2 to 8 " galv, " " 2.70
7 and 8 " " " " 3.25
An extra charge is made for 50 ft. lengths, and a still further advance for smaller pieces.
Screen Wire--
12 mesh, painted, per 100 sq.ft. $1.30
14 " " " " 1.85

COCKS AND FAUCETS.

Compression Plain Bibbs..60-10-2½%
Lever Bibb Cocks 70%
Compression Hose Bibbs.....60-10%
Telegraph Faucets (new list)...50-5%
Racking Cocks (new list) 70-5%
Compression Lock C'ks(new list)70-5%
No. 65 Brass Liquor Cocks, doz. $9.15
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz....$0.85
Milk Can Faucets, per doz.. $2 60-4.20
Petroleum Faucets (new list)....70%

COFFEE MILLS.

Enter. Mfg. Co., list Jan 17, '93...25%
Parker's.....50%
Arcade.....60&10%

COLLARS--STOVE PIPE.

Inches	5	6	7
Plain Tin....per gr.	$2.50	$2.80	$3.75
Japanned Tin, "	3.90	4.20	5.40
Lacquered Brass"	3.30	3.60	4.80

COMBS--CURRY.

Nos.	000	20	321	330	417	416
Per doz.	$0.33	.80	1.00	.95	.80	1.00
Nos.	531	533	530	535	545	390
Per doz.	$0.96	1.20	1.10	1.65	1.40	1.30

COMPASSES.

Carpenter's..... 70%
Pencil--Faber's.....per doz.$1.00

COPPER—SEE METALS.

COPPERS.

Soldering--1 to 2 lb.....per lb. 25@29c
2 lb. and larger..... " 23c

CORD.

Picture--White Wire--List October 1900.....80&10%
Sash--
Baltic Braided Flax...per lb. 20 c
Silver Lake, white 7-32 in., 29 c
" " " 8-32 in., 29 c

CORKSCREWS.

Humason & Beckley.....33⅓%
Walker's..... .....33⅓%
Williamson's Regular.....50%
Williamson's Forged Worm.....50%

COTTERS--SPRING.

All sizes—new list..... 85&20%

COUPLINGS--HOSE.

Brass .....per doz. $1.00
Brass Plated..... " 85

COVERS, WAGON--SEE TENTS.

CRADLES--GRAIN.

Morgan's Grapevine ..per doz.$22 25

CRAYONS--SEE CHALK.

CROW BARS.

Pinch or Wedge Point, per 100 lbs $3 40

CUTTERS.

Meat--
Enterprise Nos. 5, 10, 12, 22, 32, and 42.....25%
No. 100, list, $18.00.....40&10%
Nos. 2 and 4.....35%
Ideal.....per doz. $9.75
Universal....No. 1 2 3
Per doz.....$10.75 $13.00 $18.00
Pipe-Stanwoods No. 1 2 3
Each.....$ .85 1.50 4.00
Slaw and Crout--
3-knife Crout.....per doz. $9.75
1 " Slaw..... " 1.65
2 " " ..... " 2.25
Washer..... " 7.75

DAMPERS—STOVE PIPE.

Standard.....50&10%
American.... .....40&10%

DIES--STOCKS AND

Discount.....40&10%

DIGGERS.

Post Hole—

Acme.....	per doz.	$8.75
Atlas.....	per doz.	7.75
Eagle	per doz.	6.50
Eureka.....	per doz.	6.25
Hercules.....	per doz.	9.75
Iwan's Split Handle..	per doz.	$8.00
Iwan's Perfection....	per doz.	8.00
Ryan's	per doz.	17.00

DIGGERS—POST HOLE.

Atlas..... .....per doz. $8.50
Eagle..... " 6.25
Eureka..... " 6.50
Hercules ..... " 10.25
Ryan's..... " 17.00
See also Augers—Post Hole.

DOORS--SCREEN.

⅞ in. 4 panel painted per doz. $ 6.85
1⅛ " " " " 7.50
1⅛ in. 3 panel natural pine, fancy.....per doz.. 11.50

DOOR HANGERS—BARN.

Single Flange, D. B. Rail, ...per 100 ft. 1 60
Novelty Check Back, ... 3 in 4 in 5 in 6 in
Per doz. pairs. $2.60 $3.90 $4.95 $6.25

DRILLS.

Bit Stock.....60% &65&5%
Blacksmith's Twist.....60%
Breast--
Common.....each, $2.25
Millers' Falls ..... " 2.10
Hand--
Goodell's Automatic--per doz.

No. 01	No. 03	No. 3	No 20
$7.75	$12.50	$14.25	$11.00

Goodell's Single Gear per doz. $16.00
Millers' Falls " " " 12.50
" " Double " " 15.00
Reciprocating—
Goodells'.....per doz. $17 00
Bit Stock.
Standard List....60&5%@60%@10%

DRIVERS--SCREW.

Hurwood .....40&10%
Standard.....65&10%
Ajax.....70&5%
Champion.....50%
" Pattern.....75&5%
Clark's Interchangeable.. .... 33⅓%
Edison.....60%
Reed's Lightning.....50%
Goodell's Spiral.....50&10&5%
Yankee Ratchet.....50%
" " Spiral.....50&10&5%

ELBOWS.

Conductor.....,60%
Adjustable Stove—In. 5 6 7
Smooth....per doz. $0.95 0.95 1.40
Plan'd..... " 2.10 2.25 3.00
Corrugated Stove—In. 5 6 7
Smooth.....per doz. $0.95 .95 1.40
Pol'd..... " 1.70 1.75 2.60
Plan'd..... " 2.60 2.85 3.50
Four-Piece Stove—In. 5 6 7
Smooth....per doz. $0.57 .60 .92
Pol'd..... " 1.00 1.05 1.50
Plan'd..... " 1.50 1.70 2.60

EMERY--TURKISH.

Size .....5 lb. pkgs. ½ kegs, kegs.
No. 60 to 150, $2 lb. 6½c 4½c 4½c
Flour.... . " 5½c 3½c 3½c

ENAMEL—IRON.

English, ½-pt. cans...per doz. $1.50
Nubian, " " ... " 1.80
O. V. B., " " ... " 1.25
Peerless 1 50

EXTRACTORS--PIG.

See Forceps, Pig.

EYES.

Bright Wire Screw—See Goods, B. W.
Drifting Pick .....60&10%
Hooks and--
Brass.....60&5%
Iron .....65&10%

FASTENERS, STORM SASH.

Moore's.....per doz. $0 80
Schroeder's..... " 1 50
Sensible..... " 1 10

FASTENERS, BLIND.

Zimmerman's.....Net

FILES AND RASPS

Black Diamond.....70&10%
Disston's .....75&10%

FILTERS.

Improved Natural Stone.$2 50@13 50
Subject to large discounts.

FORCEPS—PIG

Barber's.....per do $7 25
Superior..... 4 75
Whisson's Imp 6 00

FORKS

Barley—
Steel.....60&20%
Wood, 4 tines,$5.50; 6 tines,$6.50 doz
Coal 40%
Coke 40%
Cottonseed 40%
Hay—
Diamond, 2 tine.....50, 10&5%
" 3 " .....60&5%
" 4 " .....60½&10%
Golden Eagle, 3 tine .....60½&10%
" " 4 " .....60&1
Digging..... .....60&10%
Scoop.....35%

FORKS—CONTINUED.

Header—
Diamond, 2 tine.....67½&10&5%
" 3 " 65%
" 4 " 65%
Golden Eagle, 4 tine.....10&10&5%
Manure—
Diamond.....60, 15&2½%
Golden Eagle.....65%&10%
Ore.....40%
Spading—
Diamond.....70&2½%
Golden Eagle.....70&2½%

Hack Saw— FRAMES
Crown.....per doz., $ 6 25
Miller's Falls..... " 10 00
Star..... " 2 85

FREEZERS—ICE CREAM

Arctic—Qts... 1 2 3 4 6
Each.....$1 10 1 30 1 50 1 80 2 30
Qts..... 8 10 12 15
Each.....$2 95 3 80 4 50 5 20
White Mountain—
20 qt.—New platform, each...$19.10
25 qt.— " " " ... 22.60
25 qt. Sampson Power " ...42.00
40 qt. " " " ...57.00

GAUGES.

Butt and Rabbet.
Stanley R. & L. Co.'s ..20&10&2½%
Cream Pail, Fairmont, per doz..$3 75
Marking, Mortise, etc.....
.....50&10%@50&10&5%
Saw—Atkin's sgle. 55c, dbl. 80c pr doz.
Wire.
Disston's.....25%
P. S. & W. Co.'s.....20%

GIMLETS.

Discount..... ...40@40&10%

GLASS—WINDOW.

Single and double strength, all sizes..... 90&15%

GLASSES—LEVEL.

Stanley R. & L. Co.....50&5%

GLUE.

Bulk.
B Amber.....per lb 9¾c
A White.....per lb 12½c
H. S. Amber.....per lb 17 c
Liquid.
Eagle.....40 %
LePage's—
List "A".....37½%
List "B".....33⅓%
List "C".....25 %

GOODS.

Bright Wire.....90&5%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gr. $5.00
Frazer's..... 9.25
Hub Lightning..... 5.25
Paragon..... 6.75
Wood Pails.
Frazer's, 15 lb. 78c, 25 lb. $1.30 each.
Hub Lightning, 15 lb. 52c, 25 lb. 68c each.
Tin Cans
Chamellene Graphite.
1 lb. per gross.....$ 9 50
3 lb. per gross..... 25 00
5 lb. per gross..... 37 00

GRIDDLES

Soapstone.....40&10%

GRINDSTONES

Family—In..... 7 8 9
Per doz.....$8 25 9 00 10 50
Loose.
Per ton.....$20 00@$31 00
Mounted—
Ball Bearing..... 1 2 3
Each.....$3 40 3 25 3 15
Common Bearing.. 1 2 3
Each.....$2 90 2 70 2 55

HAFTS—AWL

Brad—Common.....per doz., $0.18
Peg—
Common..... " 21
Patent, plain top..... " 46
" leather top .. " 52
Sewing—
Common..... " 21
Patent..... " 53

HALTERS

Jute Rope.....per dc $0 80
Sisal Rope..... " 1 95
Web..... " 2 10
Leather, rope tie..... " 6 25
" leather tie... " 8 25

HAMMERS—HANDLED

Blacksmiths' Hand
Maydole's.....40&10%
Engineers'—
Maydole's.....40&10%
Farriers'.
Maydole's.....35&5%
Machinists'.
Maydole's.....40&10%
Nail.
Ajax.....per doz $5 75
Calumet..... " 3 40
Cast.....per doz $1 10@$1 50
Maydole's.....30&7½%
Vulcan.....35&5%
Riveting.
Maydole's.....35&5%
Shoe.
Cast.....per doz 75c
Tack.
All Iron.....per doz $0 35
Pol'd Iron, Hickory hdl " 0 53
Mall. Iron, Inlaid..... " 1 50
Magnetic 1 2 3
Per doz..... 70c 80c 95c
Magazine.....per doz $4 75

HAMMERS—HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....70&10%
5 lbs. and over.....75&5%
Masons'—
Single & Double Face.....70&10%
Auger. HANDLES.
Common Ass'd.....per doz $0 36
Peck's Adjustable.... " 2 10
Roger's " .... " 4 15
Ives' " ....per set 1 25
Axe.....40%
Chisel.
Hickory, Tanged Firmer, Assorted, 24c; Large, 36c per doz.
Hickory, Socket Firmer, Assorted, 18c: Large, 31c per doz.
Applewood, Tanged Firmer, Assorted, 27c; large, 36c per doz.
Applewood Socket, Firmer, Assorted.....per doz 24c
Coal Pick.....40%
Drifting Pick.....40%
File, assorted 13c. large 18c per doz.
Hammer.
Adze Eye.....per doz 42c
Blacksmiths'.....per doz 45c@65c
Machinists'..... " 39c@58c
Hatchet.....per doz 42c
Hay and Manure Fork.....40&10%
Hoe and Rake.....40&5%
Saw, Plain 72c, Varnished 68c per dz.
Screw Driver, Assorted 42c, Large 48c per doz.
Shovel and Spade.....40%

Barn Door—HANGERS
Cronk's Automobile Loose Ax e.....60%
Cronk's Automobile Roller Bearing.....60&30%
Cronk's Loose Axle Endless Run.....60&10%
Cronk's Roller Bearing.....70&5%
King.....per doz. prs., 5 75
Monarch.....60&10%
"Never Jump" Hinge.....50&10%
Peerless, Loose Axle.....60&10%
Perfection, Roller Bearing..70&5%
Phœnix Roller Bearing... 70&5%
Prouty No. 315, per doz. prs., $5 44
Rival..... " " 3 90
Superb..... " " 6 25
Safety Flexible " " 5 44
Wagner's Adjustable.....70@10%
Warehouse.....60%
Conductor Pipe—
Iwan's Perfection.....50%
Parlor Door—
Acme.....per set $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
" New Model.... " 2 80
Prouty..... " 3 00
Richards'.....40-10&5%
Rave Trough—
Baker's.....per gr., $2 35
Imperial.....35%
Wire.....35%

HASPS.

Hinge, Wrought.....70-10&10%
With Staples—See Staples.

HATCHETS.

Ajax.....40%
Blood's.....40%
Cast Claw.....per doz $1 50@$1 75
Cast Shingling.... " 1 20
Duffy's Barrel.....per doz 17 50
Germantown.....35%
Hammond's.....35%
Roger's Ideal.....per doz $5 75
Underhill's Star Lath.....40%
U. S. A.....35%

HAY RACK BRACKETS.

Wenzlemann's No. 1, per doz...$12 60
" No. 2, " ... 13 20

Blind. HINGES.
Clark's Gravity, per doz sets....80c
Parker's.....65%
Shepherd's Noiseless, for Wood casing.....doz. $1 05
Gate.
Clark's, 1 2 3
Hgs & Ltchs, dz.. $2 35 $2 60 $3 60
Hinges Only, "... 1 70 1 90
Latches Only, "... 0 70 0 75
Knuckle.....per doz prs $6 00
Leed's..... " sets 6 75
Superior..... " prs 9 25
Spring.
American.....25%
Bommer Bros. Ball B'g Floor ...35%
Bommer Bros. Spring Hinges .40%
Chicago.....35&5%
Clover Leaf.....per gro $9
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable,....per gro $12 00
New Idea..... " 9 60
Oxford.....20%
Wrought Iron.
Light Strap Hinges ....80-5-10&10%
Heavy Strap Hinges80-20-10-10&10%
Light T Hinges.....75-10-5-10&10%
Heavy T Hinges.....75-5-10&10%
Extra Heavy T Hinges80-20-10&10%
Cor. Heavy Strap ...80-20-10-10&10%
Cor. Ex. Heavy T .....80-20-10&10%
Hart's Heavy Strap.....50&10%
Hart's Ex Heavy T.....50&10%
Screw Hook and Strap.
6 to 12in.....per 100 lbs. $3.50
14 to 20in..... " " 3.25
22 to 36in..... " 3.00
Screw Hook and Eye.
⅜in.....per 100 lbs. $6.25
⅝in..... " " 7.25
½in..... " 9.00

HOES.

Garden.....70&10%
Grub:
Ajax.....60%
Extra.....65&10%
Hazel.....per doz $5 75
Ladies' and Boys'.....70&12½%
Mortar.....70, 10&10%
Planter's Eye.....62½%
Weed.....66⅔, 10&10%

And Eyes. HOOKS.
Brass.....50&10&5%
Iron.....65&10%
Awning.....per gro $1 80
Belt
Brown's.....70&5%
Jones'.....65&5%
Bench—See Stops, Bench.
Box, In. 6 8 10 12
Doz.. $1 25 $1 60 $1 70 $2 25
Humason & Beckley's...pr dz $2 40
(See Goods, Bright Wire.)
Bush
Common Axe Handle .....per doz $7 00@$8 50
Hamilton Pattern.....per doz $7 25
Chain—In. ¼&5-16 ⅜ 7-16 ½
Per 100 $7 50-7 75 $9 50 $11 25 $12 00
Clothes Line.
Japanned.....per doz 21c@22c
Galvanized..... " 35c
Coat and Hat.
Cast Iron.....per gro 72c@$1 00
Gem Wire.....70&10%
Conductor.
Malleable.....50&10%@50&10&5%
Wrought.....40&10%@50%
Corn.
Common, unpolished, per doz. $1 40
" polished... " 1 80
"Cut Easy,".....per doz. 2 75
Clyde's,..... " 2 00
Gate.—See Goods, Bright Wire.
Grass.
Common, Nos. 2 3 1
Per doz..... $1 75 $1 80 $1 90
German.....per doz 1 90
Little Giant..... " 3 10
Wood's..... " 1 30
Hammock.
With Plate..... " 31c
With Screw..... " 31c
Lambrequin or Drapery...per gro 21c
Picture.....50%@50&10%
Potato and Manure.....60&15%
Screw, Brass.....80&20%
(See Goods, Bright Wire.)
Seat Spring.....per lb 5½c

HOOPS—TUB.

Ever Ready.....per case $1 65

HOSE—GARDEN.

3 ply ¾ in. 35 lb. pressure per ft..5½c
3 " ¾ " 50 " " " ..7½c
3 " ½ " 60 " " " ..7 c
3 " ¾ " 60 " " " ..8½c
4 " ½ " 80 " " " ..8½c
4 " ¾ " 80 " " " . 10 c
6 " ¾ " 125 " " " .11½c
8 " ¾ " 150 " " " ..31 c
Cotton ¾ in. 75 lb. pressure per.. c
" ¾ " 150 " " " .9c

Boss. HUSKERS.
Nos. E A B P
Dz. $1 85 $2 00 $1 95 Gr. $5 90 $5 20
Nos. 2000 3000 4000 O OX
Gr. $3 10 $6 75 Dz. $1 15 $2 20 $1 65
Brinkerhoff's.....per gr 14 50
Harrington..... ....per gr 4 20
Ideal—Nos. 102 101 100
Per doz..... $1 35 $2 50 $2 75
Johnson's.....per gro 7 75

IRON.

See Metals—First column.

IRONS.

Curling.
Common.....per doz 33c@48c
Princess.....per doz $0 60
Yale..... " 0 84
Oxford..... " 1 10
Ruby..... " 1 50
Tourist, Folding..... " 0 90
Pinking..... " 0 60
Plane.
Wood Bench.....20&5%
Stanley R. & L. Co. (new list)35&5%
Sad.
Charcoal.....per doz $10 75
Common, Polished, per 100 lbs 3 50
" Nickel Plated, " 4 75
Chinese Polishing.....per doz 7 60
Laundry, No. 1, $5 75; No. 2, $6 25 per doz.
Mrs. Pott's.
No. 50 J, Enterprise...per set 70c
No. 55 J, " ... " 76c
No. 50 T, " ... " 82c
No. 55 T, " ... " 79c
No. 50, Howells'..... " 73c
No. 55, " ..... " 69c
Tailors' Sad.....per lb 4¼c
" Geese..... " 4¼c
Tuyere.
Single Duck Nest.....per doz $5 25
Double " " ..... " 6 25
Sutton.....each 3 60

JACKS.

Locomotive.....75&5%
Wagon.
Meeker's.....per doz $1 25
Miller's No. 2..... " 7
Winner..... " 7

KETTLES.

Brass.....20%
Caldron.....50%
Copper.....per lb 27½c
Maslin.....66⅔%
Sugar.....50&5%

KNIVES.

Best Topping.
Clyde, 9-in. Scimiter Blade.dz $4 25
" 12-in. Straight " .dz 3 50
Cooper's Hoop.....15%
Corn.
Ajax..... " $2 10
Drawing.
Standard.....70%
Adjustable.....20%
Barton's Carpenters'.....10%
" Folding Handle....25&5%
Hay.
American, Sickle Edge...doz $10 25
Canton, Sickle Edge..... " 8 25
Heath's..... " 8 25
Iwan's Sickle Edge..... 10 00
Lightn'g, Holt's Genuine " 6 50
Lightning Pattern..... " 5 75
Wadsworth's Sp'r Point. " 8 75
Hedge.
Ajax, Heavy, $5 75; E Heavy, $7 75 per doz.
Mincing.
Common, Single .....per doz 48c
" Double..... " 65c
Streeter, 4 Blade, $1 30; 6 Blade, $1 90 per doz.
Putty.
Common.....per doz 84c
Goodell's.....per doz $1 30@$1 80
Russell's..... " 1 75@ 2 25

KNOBS.

Door, Mineral.....per doz 0 70
Porcelain..... " 0 80
Jet..... " 0 80

LADDERS.

Common Long.....per ft 9c@14c
Extension.....per ft 12c
Step.
Common..... " 7c
" With Shelf, add 10c.
I X L.....per ft 17c
Miller's Household. per ft 13c@15c

LANTERNS.

Bull's Eye Police.
3-in Flash Light.....per doz $6 00
2¾-in Regular..... " 4 00
3-in Regular..... " 5 00
Tubular, Berger.....40&10&5%

LEADERS—CATTLE.

Nos. 1 2 3
Per doz.... $0 70 $0 85 $3 75

LEATHER—LACE.

Cut.....50&10%
Sides, Ex. Quality.....per sq ft 30c

LEATHERS—PUMP.

Valve and Plunger.....50%

LIFTERS.

Stove Cover.
Japanned.....per gro $2 75
Coppered..... " 3 60
Chilkoot..... " 4 [illegible]
Devore's..... " 5 50
Zero..... " 3 90
Transom, Payson's.....70&10%

LINES.

Chalk, Twisted in 20-ft hanks.
Nos. 15 14 13 12 11
Per doz.. 10c 12c 17c 22c 29c
Twisted in 50-ft balls.
Nos. 1 2 3 4
Per doz..... 24c 30c 36c 44c
Braided in 20-ft hanks.
Nos. 0 1 2
Per doz..... 23c 26c 32c
Masons', in 100-ft hanks...doz $1 00
Clothes.
60-ft Jute.....per doz $0 95
72-ft " ..... " 1 10
60-ft Sisal..... " 1 60
72-ft " ..... " 2 10
60-ft Cotton..... " 1 35
50-ft Braided Cotton..... 1 00

LINING—STOVE.

In Bricks.....per crate 42c

MACHINES.

Boring	Without Augers.	With Augers.
Ajax.....per doz	$5 25	$6 75
Angular... "	3 25	5 00
Boss..... "	4 50	5 00
Upright... "	2 90	4 00

Leather Riveting.
Chicago, Pomeroy ....per doz $9 75
Excelsior..... " 2 50
Handy..... " 2 10
Little Giant..... " 3 10
Pony, Pomeroy..... " 8 00
Washing.
Boss. 1 2 5 3
Per doz.. $57 00 $63 00 $69 00 $60 00
Globe, No. 1.....per doz $53 00
O K Rotary..... " 55 50
Round Wayne..... " 26 50
U. S. Steel..... " 60 00

MALLETS.

Carpenters'.
Fibre Head, Small. Med. Large.
Per doz..... $5 00 $5 75 $6 75
Round Hickory.....per doz $1 75
" Lignumvitæ.... " 2 75
Square Hickory..... " 1 75
" Lignumvitæ.. " 3 25
Tinners'.
Applewood..... " 60
Hickory..... " 85
Hickory Sheet Iron. " 1 80

Door.
MATS.
National Rigid ..... 50, 10&5%
Queen Flexible 50%
Stove.
Standrd Quality ..... per gross $2 75
Best " (Pure) " 4 75
Wire Covered Asbestos, Ex. Heavy ..... per doz 1 00

MATTOCKS.
Ajax ..... 65&10%
Extra 60%

MAULS.
Iron, lbs. 10 13 16 18 21
Per doz. $3 15 $3 85 $4 45 4 75 $5 25
Wood face, lbs. 10 11 13
Per doz $4 75 $5 00 $5 25
Wood Choppers'.
Lake Super'r & Oregon Pat. 70&10%

MEASURES.
½ pk 1 pk ¼ bu
Galvanized .. per dz $3 65
Japanned .. " $1 40 2 10 $2 60

Babbitt. METAL.
Alm ..... per lb 8¾c
Best ..... " 23c
Common, No. 4 ..... " 6½c
Copper Mixed ..... " 18½c
Magnolia Metal ..... " 19c
Tony ..... " 10¼c
See Metals—In first column.

MICA.
First Quality ..... 40, 10&5%
Second Quality 60%

MILLS—COFFEE.
Enterprise ..... 35&5%
National 30%
Parker ..... 50&10%@60%

MOPS.
Iris ..... per doz $3 15
Handled Cotton.
Lbs. ¾ 1 1¼ 2
Per doz .. $2 00 $2 35 $2 65 $3 25

MOWERS—LAWN.
Ball-Bearing.
In. 15 17 19 21
Each $7 50 $8 50 $9 50 $10 50
Champion.
In. 13 14 16 18 20
Ea. $2 30 $2 35 $2 35 $2 65 $2 75
Champion, High Chief.
In. 16 18 20
Each $4 00 $4 50 $5 00
Cheap Grades.
In. 12 14 16 18
Each $2 10 $2 10 $2 10 $2 20
Clipper ..... 50&10&10%
Girard, in. 14 16
Each $3 25 $3 50
Philadelphia.
All Styles Except A & E 60&10&10%
Style A ..... 50&10%
Style E, High Wheel .. 60, 10, 10&10%
Drevels 50%
All Day ..... Net Price

Horse Shoe. NAILS.
Ausable 50%
Capewell 10%
Perfect ..... 40&5%
Putnam 10-5%
Star 35%
Picture.
Brass Head ..... 40&10%
Judd's ..... 40&10%
Brads ..... 80&10&10%
Furniture 40%
Wire.
Small Lots $2.75
Carload " 2 15
Cement Coated 2 10

NETTING—POULTRY.
Galvanized Before Weaving .. 80&20
" After Weaving .. 80&15
Cut Pieces ..... 65&5%

NIPPERS.
End Cutting.
P. S. & W. Co. ..... 40&5%
Stubb's Pattern ..... 40&10&5%
Hoof.
Heller's ..... 40&5%
P. S. & W. Co. ..... 40&10%
V. & B 40-5%
Hose. NOZZLES.
Genuine Boston ..... per doz $3 15
Genuine Gem ..... " 3 15
Magic ..... " 3 40

NUTS—HOT PRESSED.
Square Blank.
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
Lb. 9c 6c 4c 3¼c 3¼c 3¼c 3c
Square Tapped.
In. ¼ ⅜ ½ ⅝ ¾
Lb. 11¾ 7½ 5¼ 4½ 4¼
For 5 lb. boxes add ⅛c per lb. to above prices.

OILERS.
Chase Pattern.
Brass and Copper 35%
Zinc 60%
Engineers'.
Cannon 10%
Tin ..... per doz $2 00@$3 00
Machine.
Ajax ..... per doz $0 80
Copper Plated Steel .. " 1 50
Malleable Iron ..... 40&10&5%
Tin ..... per doz 55c@65c

OPENERS.
Box, in. 10 12 14
Flat .. per doz $2 85 $3 60 $4 15
Round .. " 2 10 2 25 2 75
Can.
Delmonico ..... per doz 1 30
Never Slip ..... " 0 65

Crate, V. & B ..... " 5 75

OUTFITS—COBBLING.
Combination ..... per doz $11 50
Economical ..... " 4 90
Family ..... " 10 00

PADLOCKS.
Standard Wrought ..... 70&10&5%
Champion 50%
Eureka ..... 40&10&5%
Yale ..... 60&5%

Cream. PAILS.
14-qt., Without Ga .... per doz $2 75
20-qt., " " .... " 3 25
20-qt., With Gauge .... " 4 20
Sap, 10-qt., Galvanized, $1 60; 12-qt., Galvanized, $1 85 per doz.
Stock, Galvanized.
Quarts. 14 16 18 20
Per doz ... $3 75 $4 00 $4 65 $5 25
Water, Galvd, qts. 10 12 14
Per doz $1 75 $2 00 $2 35
Wood.
Cable, 2-Hoop, $1 90; 3-Hoop, $2 10 per doz.
Cedar, 3-Hoop, $3 85 per doz.
Standard, 2-Hoop, $1 65; 3-Hoop, $1 85 per doz.

PANS.
Dripping ..... 50&10&5%
Fry, Common ..... 60&10&5%
Acme ..... 66⅔&5%
Roasting.
Brownie ..... Each 30c@37c
L. & H ..... " 58c@80c
Building. PAPER.
Plain ..... per 100 lbs $1 15
Tarred ..... " 1 25
Tarred Felt ..... " 1 80
Diamond A, Red Rosin, pr roll 0 60
Leader, Red Rosin ..... " 0 45
Sand and Emery.
Ajax ..... 50&10%
B. & A ..... 50 & 5%
Wrapping.
Grecian Express ..... per lb 3⅜c
Rag ..... " 2⅛c

Apple. PARERS.
Bay State ..... per doz $13 00
Reading ..... " 6 75
Turntable ..... " 6 00
White Mountain ..... " 5 25
Potato.
Goodsell's Saratoga .. per doz. $6 50
White Mountain ..... " 6 00

PICKS
Adze Eye Ore ..... 65&10%
Drifting and Pol. Picks ..... 60&10%
Ajax Railroad 60%
Extra Railroad ..... 65&10%
Surface 65%

PINCHERS.
Carpenters', wrt. iron, pol. steel jaws 30%
Blacksmiths' 50%
P. S. & W. ..... 40&10&5%

Clothes. PINS.
Common ..... per gr .. $0 12
Hoyt's ..... " .. 30
U. S. ..... " .. 70
Picket.
Fluted 15 in ..... per doz .. $0 70
" 21 in ..... " .. 1 60
Spiral ..... " .. 1 90

PIPE.
Conductor. Nested Not nested
Eastern, A ... 75&7½% 75&2½%
Eastern, B. 75&10&2½% 75&7½%
Central ..... 75&7½% 75%
Southwst'n .. 70-&7½% 70&2½%
Texas ..... 70&7½% 70&2½%
Mo. River, ... 70&7½% 75%
Southern ..... 70&10% 70&5%
Lead.
Full coils ..... per lb ... 6
Cut " ..... " .. 6½
Stove.
Acme—In. 5 6 7
Smooth, per jt. 10½c 10½c 12½c
Planished, " .. 33c 33c 43 c
Peerless—Smooth .. 8½c 9c 11½c
Polished. 16c 18c 22 c
Planished 28c 31c 40 c
Made-up—In. 5 6 7
Smooth ..... 8½c 9c 12 c
7 to 6 in. Smooth Tapers, pr jt .. 14c
6 in. Smooth T's ..... " .. 30c
7 to 6 in. Planished Tapers 45c
Wrought Iron Gas Pipe.
⅛@⅜-in., black ..... discount, 62½%
⅛ " ..... " 65%
¾-in. to 4-in, black .... " 70&5%
4½ " 6 " .... " 70&5%
7 " 12 " .... " 65%
⅛@⅜ " galvanized " 50%
½ " " " 55%
¾ " to 4 " " 57½%
4½ " " 6 " " 57½%
7 " " 12 " " 52½%

PLANES.
Siegley Iron Bench ..... 50&10%

Corn. PLANTERS.
Monitor ..... per doz .. $7 75
Triumph ..... " .. 6 00
Potato
Acme ..... per doz .. $6 25
Challenge ..... " .. 10 75
Fencing.
Cronk's ..... per doz .. $9 25
Farmers' Choice ..... " .. 8 75
Russell's ..... " .. 8 65
Flat and Round Nose.
Bernard's 30%
German 50%
Lodi 40%
Paragon ..... 40&10%
P. S. & W. Co. 60%

Gas—In. 8 10 12
Per doz $3.10 $4.00 $4.90

PLIERS.
Button's—In. 4½ 6 8 10
Per doz $2.60 $3.10 $3.90 $5.20
Button' Pattern.
In. 4½ 6 8 10
Per doz .. $2.35 $2.50 $3.45 $4.40
Cutting.
Bernard's 30%
Cronk's Impr'vd Button Pliers .. 75%
Cronk's Linemans No. 80 ..... 40%
Cronk's Stubbs Pattern ... 50&10%
Cronk's No. 1 ..... 60&10%
Cronk's Staple Puller Pliers .. $9 00
Lodi ..... 40&10&5%
4 Tube, revolving .... " .. 5 25
Tinners'.
Hollow .....
Solid ..... each .. 5½c

PLUMBS AND LEVELS.
Common ..... 75%@75&10%
Cook's 40%
Davis' Iron 30%
Davis' Inclinometer 20%
Stanley's
Nos. 00S 0S 2S 3S
Per doz .. $4.50 $5.20 $7.60 $8.65
Nos. 30 25 50 35
Per doz. $13.00 $17.50 $17.50 $12.35

POINTS.
Drive Well Points ..... 80&10%

POKERS—STOVE.
Wr't Iron, str't or bent, per doz. $0 50
Wr't Iron, wood hand'l's " 75
Nickel pl'td. coil hdl's .. " 70

POKES—ANIMAL.
Brown's, wr't steel, per doz. $5 00@6 00

POLES—FISHING.
Bamboo
Ft. 12 14 16 18 20
Pr 100 .. $2.75 $3.40 $4.75 $6.00 $7.75

POLISH.
Metal.
Pride of the Bar ..... " .. 1 60
Putz Cream.
Pts. 1-6 ¾ ⅛
Per doz $0.84 $1.25 $1.80
Pts. 1 2 4 8
Per doz. $3.60 $6.00 $9.00 $18.00
White Silk, half pints, per doz. $2.00
White Silk, 6 oz. cans, per doz. 1.00
Wondershine
Pts. 1-6 ½ 1 2
Per doz ... $0.68 $1.30 $2.15 $3.00
Shoe.
M. D. C. ..... per doz .. 35c@50c
F. C. O ..... " 40c
T. M ..... " 50c@$1 25
Imperial ..... per gr. $5 00
Stove.
Black Eagle, 1 lb cans, prgr .. $15 00
Black Silk—
5 lb. pail 70c
Paste, 5 oz. cans per doz $1.00
Paste, ½ lb cans, per doz ... 1.00
Black and Japanned—
Liquid, ½ pint cans per doz. 1.00
Liquid, 6 oz. cans per doz 75c
Steel Range Gloss per doz ... 1.75
Blackene, 1 lb cans .... pr gr .. 12 00
Black Jack, ¾ lb cans. " .. 9 00
Dixon's Carb. of Iron. " .. 5 75
Nickel Plate ..... " .. 4 50

POPPERS, CORN.
Round or Square, 1 qt. per doz., $5@$5c
Square, 1½ qt ..... per doz., $1 00
Square, 2 qt ..... per doz., 1 25
1 qt. reversible ..... per doz., 1 50

POTS—FIRE.
Bernz ..... each .. $3 85
Clayton & Lambert's, each, $4 75@6 25
Gate City ..... each .. 6 25
Gem ..... " .. 6 75

POWDER.
See Ammunition.

PRESSES—FRUIT AND JELLY.
Enterprise Manufacturing Co ... 35%
Henis ..... per doz. $2 10

PRUNERS.
Disston's Pole ..... per doz .. $7 50
Henry's Improved .. per doz .. 65&10%
Water's Improved. " 70, 10&5%

PULLERS.
Cork.
Modern ..... each .. $2 60
Quick and Easy ..... " .. 2 90
Nail.
Giant ..... per doz .. $9 00@10 50
Giant Pattern. " .. 00
Tack—Giant .... " .. 60

PULLEYS.
Awning—Jap'd ..... 40&5% to 35&5%
Clothes Line ..... 30&10%
Hay Fork.
Iron Wheel, 5 in ..... per doz .. $1 85
Wood Wheel, 6 in ... " .. 1 80
Wood Wheel, 6 in ... pass knot ..... " .. 2 25
Hot House—Jap'd ..... 30&5%
Screw ..... " ..... 30&5%
Side ..... " ..... 30&5%
Sash.
Chicago ..... per doz .. $0 39
Clark's ..... " .. 42
Common Sense, 2 in .. " .. 26
" Pattern, 2 in .. " .. 20
Empire ..... " .. 24
Ideal ..... " .. 22

PUMPS
Pitcher Spout.
Nos. 1 2 3 4
Each ..... .90 $1.00 1.10 $1.40

PLATES—TIN.
See Metals in Column 1.

Spray.
Blizzard ..... per doz .. $14 25
Cyclone, tin ..... " .. 3 90
" copper ..... " .. 6 75
Daisy ..... " .. 8 75
Little Giant ..... each .. 3 40

PUNCHES.
Conductors', No. 22 .... per doz .. $2
Machine ..... per lb ..
Saddlers'.
Common ..... per doz .. 60c@70c
Good ..... " .. 72c@84c

PUTTY.
In Bladders.
Strictly pure ..... per 100 lbs. $2 35
Commercial ..... " " 2 10

RAIL.
Barn Door.
Light Wrought .. .. per ft. 3c
Safety ..... " 4½c
Single Flange ..... " 1⅜c
Smith's Wro't Bracket—plain 3½c
Smith's Special 4½c
Smith's "Never Jump" 11c 50%
Smith's Plain Steel 30%
Smith's Milled Steel 4½c
Sliding Door.
Painted iron ..... per ft. 4½c
Bronzed wr't iron ..... " 8½c

RAKES.
Coal or Road ..... per doz. $6.50
Garden.
Cronk's Champion 70%
Cronk's Victor 75%
Steel, braced ..... 75&15%
Steel, bow 70%
Malleable iron, heavy 70%
Hay—Wood ..... per doz. $1 40@2 00
Lawn—Wood.
Common ..... per doz. $2 50
Automatic ..... " 6 00
New Lawn Queen ..... " 3 60
Jumbo, 36 teeth ..... " 6 50

RASPS—See Files.

REGISTERS.
List July 1, 1903
Black and White Japanned .. 70 to 75%
Nickel Plated ..... 70 to 75%
Electroplated, Brass, Bronze or Copper ..... 70&75%

RINGS
and Ringers—Hog.
Blair's Rings ..... per doz. 60c
Blair's Ringers ..... " 84c
Brown's Rings ..... " 65c
Brown's Ringers ..... " 90c
Champion Ringers ..... " 1 70
Hill's Rings ..... " 48c
Mazor Rings ..... " 60c
Mazor Ringers ..... " $1 15
Perfect Rings ..... " 84c
Perfect Ringers ..... " $1 05
Wolverine Rings ..... " 1 50
Wolverine Ringers ..... " 70c
oil.
Copper 2 in. 2½ in 3 in
Per Dozen $1 35 1 70
Rea's Impro'd Self Piercing copp r, pr d'z $1 50 1 75 2 00
Steel, per doz $ .95 1 05
Nickel Plated 1 35
Fruit Jar—White ..... per lb. 30c
Key.
Split, round ..... per doz. 1
Split, square ..... " 32c
Ball, round ..... " 32c

RIVETS.
and Burrs.
Copper Belt ..... 50&10&5%
Coppered Iron 75%
Tinners' ..... 66⅔@10%
Hame ..... per lb.
Slotted Clinch ..... per doz. 40c@45c
Tubular—Nos. 1 and 2, assorted sizes ..... per doz. 45c

ROPE.
Per lb.
Manila, 7-16 inch diameter and larger rates 11½c
Sisal, 7-16 in. and larger 8½c
Cotton.
¼, 5-16-in. Com on reels. per lb. 12½c
¼, 5-16-in Com in coils " 14c
¼, 5-16 Imperial in coils " 22c
Sewall & Day Sisal Rope, rates 10c

RULES.
Boxwood 60%
Ivory ..... 35&5%

SASH WEIGHTS.
Per ton, f.o.b. Chicago $35.00

SAWS.
Back.
Disston's ..... 35&7½%
Jackson's ..... 35&7½%
Butchers'—Disston's ..... 35&7½%
Circular.
Disston's 50%
Hilles' 50-10%
Compass.
Common ..... per doz. $1 35@1 60
Disston's ..... 35&7½%
Cross-Cut.
Atkin's 40%
Disston's ..... 40&10% &50%
Pocahontas Bit ..... per ft. 39c
Pocahontas, Blued ..... " 41c
Dehorning.
Atkins' ..... per doz. $5 50
Disston's ..... " 5 75
Hack.
Disston's 25½%
Keystone 33⅓%
Sterling Hack Saw Blades 25%
Sterling Hack Saw Frames 20%

SAWS—CONTINUED.

Hand and Rip.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120.....25&7½%
Gorham's Comb.....30&7½%
Keystone.....30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand..... " 5 75
"I Will," rip..... " 6 75
"U. S. A." hand..... " 12 25
"U. S. A." rip..... " 14 25
Keyhole—Disston's .....25&7½%
Kilchen
Sterling.....25%
One Man 50%
Panel.
Brown's .....30&7½%
Disston's No. 7.....30&7½%
Disston's D100.....25&2½%
"I Will".....40%
"U. S. A.".....40&10&5%
Pruning.
Avery's Duplex .....25&7½%
Brown's .....25&7½%
Disston's.....25&7½%
Wood.
Common.....per doz. $4 50
Handy ..... " 7 50
Happy Medium ..... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever.....per doz. $ 1.20
Stillman's Lever.....per doz. 1.30
Leach's.....per doz. 5.00
Nash's.....per doz. 4.20
Monarch.....per doz. 6.50
Atkin's Pattern.....per doz. 3.50

SAW FRAMES.

Common, plain.....per doz. $1 20
" painted..... " 1 60

Counter. SCALES.
Fairbank's Standard.....30, 10&5%
Hatch's.....per doz. $21 50
Little Detective, 1 2 3
Each $2 00 2 25 2 10
No. 1 Tea .....per doz. 7 75
Union Platform.....each 2 40
Pelouze .....40&10%
Turnbull's Market.....50%
Platform.
Common, 600 800 1000
Each $6 20 8 75 9 50
Chicago Standard.....30 to 33⅓%
Fairbank's Standard.....40%
Osgood..... .....50%

SCOOPS.

Grain.
½ Bu. "Hercules," per doz...$13 75
1 " " " ... 15 50

Box. SCRAPERS.
Stanley's Adjustable, per doz. $3 60
Triangular ..... " 2 50
Cabinet.
Ajax .....per doz. $2 25
Cast Steel ..... " 65c@75c
Stanley's No. 80..... " $8 40
Road.
Cubic ft. 7 5 3
Without runners, ea. $4.35 4.10 3.85
With runners.... " 4.60 4.35 4.10

Bench. SCREWS.
Iron..... ..... 40&10%
Wood, white maple..per doz..$3 60
Hand--Wood.....20%
Hand Rail.....70&10%
Jack .....75&5%
Lag or Coach, ...80%
Saw—Centennial.
Nos. 1 2 3 4
Per doz..... 22c 25c 32c 36c
Wood.
F. H. Bright Steel ....87½, 10&10%
R. H. Blued Steel.....85&5%
F. H Jap'd Steel.....82½&5%
F. H. Brass .....85&5%
R. H. Brass .....80&5%
R. H. Nickel Plated.....75%

SCYTHES.

Clipper, grain.....per doz..$7 75
Dutchman, grass ..... " .. 5 25
Golden Clipper, grass. " .. 5 00
U. S. A., grass..... " .. 5 75

Nail. SETS.
Round, common.....per doz..$0 33
Square " ..... " .. 42
Octagon " ..... " .. 33
Square, Buck Bros.. " .. 1 25
Cup Point, knurled, pr doz. 70c@90c
Steel.
Farmers'.....per doz..$1 45
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz..$3 50
Common Lever. ..... " .. 1 20
Disston's Monarch... " .. 6 50
" X Cut..... " ..11 75
German..... " .. 1 35
Morrill's Old Style... " .. 5 00
" Pattern.... " .. 4 50
Leach's..... " .. 4 80
Nash's Hand..... " .. 4 00
" X Cut..... " .. 5 50
Stillman's Lever..... " .. 1 30
" X Cut..... . 2 50

SHARPENERS—SKATE.
Diamond.....per doz..$1 60

SHAVES--SPOKE.
Iron.....per doz..$1 35@$2 75
Wood..... " .. 2 75@ 4 75
Bailey's .....50&5%
Goodell's.....15%
Stanley's Universal.....30&5%

Pruning. SHEARS.
Buckeye, No. 1.....per doz..$6 75
" No. 2..... " .. 8 40
California Pat., 9 in.. " .. 4 25
" 10 in.. " .. 5 00
Draw Cut, No. 3..... " ..14 75
" No. 4..... " ..17 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star.....per doz..$4 75
Sheep--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.25 $11.50 $12.00
Nar.Grip.. 11.75 12.00 13.00 doz.
Tinners'--See Snips.

SHEAVES--SLIDING DOOR.
In. 3 4 5
Common..Per set..$0.42 $0.48 $0.70
Hatfield's. " .. .75 1.00 1.60

SHELLERS--CORN.
Union .....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.
Drain.
Iwan's Perfection.....50%
Railroad, Etc.
Gold Hibbard's.....per doz.. $9 25
C. H. Conovers's..... " .. 7 75
Beckwith's..... " .. 7 75
Hickory..... " .. 6 25
Greenleaf's..... " .. 5 75
Columbus..... " .. 5 00
Ames' new list.....Discount 12½%
Coal.
No. 2 Ajax.....per doz..$5 25
No. 4 Golds..... " .. 6 25
Ames' new list.....Discount 12½%

SIFTERS.
Hunter's Genuine..... per doz. $1.10
" Imitation..... " .90
Tin Rim, 16 mesh plain wire 1.35
Wood " 16 mesh plain wire .80

Cast Iron. SINKS.
Painted..... . 1 &5%
Enameled, White..... 60-10&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES--See Hammers.

SNAPS—HARNESS
Champion.....65%
German Pattern.....30&5%
Judd's Pattern.....60&10%@70%

SNATHS.
Double Ring, Bush....per doz..$6 75
Patent Loop " .... " .. 7 30
" " Grass.... " .. 6 50

SNIPS--TINNERS'.
Hernisch's .....40&5%
National .....40&5%
P. S. & W. Co.'s.....35&5%

SOLDER.
See Metals, Column 1

SPRINGS--DOOR.
Perfect. Nos. 1 2 3 4
Per doz..... 32c 38c 45c 48c
Reliance, Light $1.40, Heavy $2.20 doz.
Star..... " .90, " 1.30 "
Torrey's.....per doz..$1 25
Warner's— No. 11 No. 13
Per doz..... 70c $1 30

SQUARES
Steel and Iron 70%
(Add for Bluing, $2.50 per doz., net.)
Mitre--Stanley's No. 12 .....40%
Try.
Stanley's No. 30, new list...30&10%
" Nos. 12 and 14.....40%
Try and Bevel--Stanley's.....40&5%
Try and Miter.
Fox's.....per doz..$7 25
Winterbottom's 50%

SQUEEZERS--LEMON.
Common Wood.....per doz..$0 70
Porcelain Lined, wood. " .. 1 30
Boss, tinned iron ..... " .. 82
Pearl, nickel plated... " .. 1 30
Star " " ..... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King..... " .. 2 50
Drum ... . " .. 4 75

STAPLES.
Blind—Barbed .....per lb. 9½@10c
Butter Tub..... " 8@8½c
Fence, less than carload.
Polished .....per 100 lb. $2 40
Galvanized ..... " 2 70
Netting—Galvanized.....per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples..... 85-10&5%
Extra heavy .....75&10%

STEELYARDS.
Discount 25%

STONES.
Axe.
Hindostan .....per lb. 5½@7c
More Grit..... " 9½c
Washita ..... " 16½c
Emery.....60%@60&5%
Oil—Unmounted.
Arkansas Hard .....per lb. $2 00
Arkansas Soft ..... " 1 15
Hindostan ..... " 6½@8½
Oil.—Unmounted.
Lily White..... per lb 43c
Queer Creek..... " 14½c

Ouachita..... " 36c
Washita..... " 25c
Sythe—Black Diamond.per gro. $7 75
Clear Grit ..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 20
La Moille..... " 7 00
White Mountain.....per gro. 6 50
Willoughby Lake .... " 6 25
Red End ..... " 3 15

STOPS—BENCH.
Hotchkiss'.....per doz. $3 60

STOPPERS—FLUE.
Common .....per doz. 42c
Crown..... " 48c
Gem, flat, painted..... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's ..... " $1 20
Peerless ..... " 72c
Skinner's Common Sense " 95c

STRAPS.
Scoop .....per doz. prs. $1 80
Skate..... " " 60@70c
Carpet. STRETCHERS.
Bullard's .....per doz. $3 90
Excelsior ..... " 6 00
Malleable Iron..... " 70
Perfection ..... " 6 00
King ..... " 4 50
Wire.
N. S. Elwood's .....per doz. $5 75
O. S. Elwood's..... " 6 00
Little Giant ..... " 5 50
Star Lever..... " 6 25
Star Tackle Block..... " 9 25
Warner's ..... " 6 25

SWIVELS.
Malleable Iron .....per lb. 5½c
Wrought Steel.....per gro. $4 50

TACKS.
American Cut.....90&5%
American Wire.....85&25&10%
Bill Posters Cut .....90&40%
Blued Carpet.....90&15%
Tinned Carpet.....90&15%
Gimp .....90& 0&10%
Upholsters' Cut .....9[illegible]&5%
Upholsters' Wire .....90&25%
Double Pointed .....90&20%
Copper .....per lb 27c
Canvas Nails.....75&5%
Clout Nails.....75&10&5%
Hungarian Nails.....80&5%

TAPES--MEASURING.
Asses' Skin .....40&10%
Bend Leather.....25%
Patent Leather.....25%
Lufkin's Steel.....30%
Lufkins Metallic 30%

THERMOMETERS.
Tin Case.....per doz., 95c@$1 25
Wood Back..... " $1 75@ 9 00
Glass ..... " 15 50

Bale. TIES.
Single Loop..... 80%
All other kinds.....70%
Cow--See "Chains."

TOOLS—SAW.
Atkin's Dexter.....per doz. $4 25
Atkin's Excelsior..... " 6 25
Disston's Universal 40%
McDonald's 33⅓%
Game. TRAPS.
Newhouse. 50%
New Victor 75-10%
Mole—Reddicks .....per doz. $5 75
Mouse and Rat.
Wood Choker.....per hole 11c
Tin Choker ..... " 9c
Delusion.....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat..... " $6 75
Marty Rat, Imitation.. " 3 75
Marty Mouse..... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic..... each $3 60
Fly.
Balloon.....per doz. $1 10
Harper's..... " 1 25
Brick. TROWELS.
Standard.....30%
Brade's.....10&7½%
Disston's.....30%
Rose's.....25%
Plasterers'.
Standard 33⅓%
Disston's.....30%
W. & McP 25%

TRUCKS.
Bags.... A.....each $1 70
Handy..... " 1 50
Warehouse.....60&5%
No. 1 2 3
Half Ironed.....$2.60 $3.40 $5.00
Full Ironed..... 3.90 5.75 6.75
TUBS-WASH. Ex.
No. 3 2 1 large
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel .... " 5.60 6.60 7.50 10.00
Cedar .... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70
Galvanized. No. 1 2 3
Per doz $5.25 5.75 6.50

TWINE. per lb.
3-ply Cotton Wrapping.....21c
4 " " " 21c
4 " Cotton Extra Wrapping.....27c
4 " " Hvy. Wrap'g.26c
4 " " Wrapping on tubes.23c
3 " " " cones.23c
4 " " " " 23c
India Hemp, ¼-lb. balls.....18c
" " ½-lb. " 17c
" " ¼-lb. " ...doz., 65c

2-ply " ¼-lb. " 11½c
3 " " ½-lb. " 11½c
Jute Wrapping, ½-lb. balls.....11½c
Jute Wool, 1-lb. balls..... 6c
Seine. Nos. 6 9 12 15 +
Soft, per lb. .25 .24 .23½ .23
Med. " " .24 .23½ .23
Hard " " .27 .25½ .24½
Staging, ¼-lb. ball, size 21.....23c
" ¼-lb. ball, " 24.....23c
" ¼-lb. ball, " 27.....22c
Bagging, ¼-lb. ball..... .....22c
3-ply "B" in hanks.....19c
4 " "B" " " 19c
3 " "A" " " 29c
3 " Silver Finish, in hanks....39c
Fodder or Lath.
130-strand..... ..... 8c
200-strand.....8½c

VISES.
Bonney's.....30%
Cheney's 20%
Parker's Oval Side.....
.....50, 10, 2½% @ 50, 10, 5, 2½%
Parker's Parallel.....15@20%
Parker's Victor.....10%
Parker's Combination.....50&10%
Solid Box..... .....60&5%
Adam's Mechanics'.....each $3 65
Williamson Universal..... ..20%

WARE.
Cast-Iron Hollow.
Ground .....40, 10&2½%
Unground .....50, 10&2½%
Extra Finished..... .40&10%
White Enameled.....50, 10&5%
Maslin Kettles.....65%
Enameled.
Cherry Blossom 33⅓%

WASHERS.
Standard O. G. cast iron, per lb..2½c
Wrought iron in bulk per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
7¾c 5½c 4c 3¾c 3½c 3½c 3½c
Wrought steel in 5 lb. boxes, per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
8¾c 6½c 5c 4¾c 4½c 4½c 4½c

WEDGES.
Ax.....per doz....30c
Galling .....per lb..10½c
Saw..... " .. 8½c
Calf. WEANERS.
Fuller's, per doz.....$2 00 to $2 50
Tyler's Safety, per dz 1 85 to 2 40
Carroll's, per doz..... 2 50 to 3 25
Standard, per doz..... 2 75
Hoosier, per doz..... 3 10 and 4 15

WEIGHTS.
Hitching.....per lb 2½c
Sash--F.O.B. Chicago..pr ton..$20.00

WHEEL BARROWS.
Common Railroad....per doz..$16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 47 00
No. 04½ " " ... " .. 50 00

WHEELS.
Corundum.....70&10&5
Emery.....75&5%
Well. In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.
Barbed. Painted. Galv'd.
Carloads...pr 100 lbs..$2.4 $2.75
Less than car " .. 2.5 2.85
Brass.
In coils..... ....20%
In 1 lb. spools, new list.....50&10%
Broom--Tinned.....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%33⅓%
In 1 lb. spools, new list.....50&10%
Fence--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.15
Nos. 6 to 9, Galv'd... " 2.45
Hair--New list.....50&10%
Market.
Bright, full bdles.....70&10%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles ....65&10%
Tinned, full bdles..... .....70&5%
Tinned, broken bdles.....65&10%
Picture.—In coils.....80%@80&10%
In 5 lb. spools .....per lb..26c
Plain—Small lots.....$2.00
Car lots..... 1.95
Small spools 5c per hundred higher

WRENCHES.
Acme Standard.....60%
Alligator .....65&5%
Always Ready.....40&10&5%
Bemis & Call.....40%
Coe's Standard.....40&10%
Girard's Agricultural..... 75&10%
P. S. & W. Co.'s Agricultural 75&10%
" " Knife H'dle..50&5%
Wescott's "S ".....33⅓%
Malleable "S ".....per lb. 06½c
Malleable.....per lb. 06½c
Stillson Pipe.....60&5%
Trimo " 60%
Clothes. WRINGERS.
No. 22, Guarantee.....pr doz. $28 50
No. 110, Guarantee.... " 29 50
No. 110, Brighton..... " 21 50
No. 22, Pioneer..... " 20 50
No. 2, Superb..... " 19 50
No. 730, Easy..... " 26 00
No. D 110, Domestic... " 25 50
No. E 350, Empress... " 28 50
No. 122, Bicycle Ball-bearing..... " 31 50
No. 122, Swan ..... " 27 50

Wants and Sales.

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

For Sale—A nice clean stock of hardware, about $3,500, in a nice town in Iowa, population of town 3,500. Good country around. Good crops. Only one other hardware. Best of reasons for wanting to sell. Address Lock Box 685, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—Tinshop. Good trade. All two men can do. For further information address F. Kimmel, Parsons, Kans. 5

For Sale—In western Iowa, a nice clean stock of hardware with stoves and tinshop. Large town. Fine cash trade. Failing health. Address "Western," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—A new up-to-date hardware stock in one of the best towns in central Illinois; $12,000 business last year. Good reasons for selling. Address "J.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—Stock of clean up-to-date hardware invoicing about $5,000. Can be reduced without harm to business. Stock is located at Heron Lake, Minn. If you are looking for a good opening for hardware business, look this up. A chance to make some money. For particulars address Ebert Hardware Co., Truman, Minn. 5

For Sale—An up to date hardware stock and tinners' tools in a good country town; will give a bargain if sold soon. Address Baughman & Holmes, West Salem, Ohio. 4

For Sale—One of the best tin and plumbing shops in Iowa. First-class location in one of the best towns in the state. Population 4,500. Three railroads. Best of reasons for selling. Address "Snap," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 4

For Sale—Best paying plumbing and tin-shop in northern Arkansas. Last year's business, $5,960. Good reasons for selling. Am working three men at present. Will work from three to seven this summer. Address W. J. Hall, Batesville, Ark. 3

For Sale—An up-to-date old-established hardware business; good reasons for selling. For particulars write Frank Hess, Clarksville, Iowa. 3

Wanted—Pacific Coast Agency for dust collector, for saw mill work. Address L. W. Wynkoop, 248 Ash St., Portland, Ore. 3

For Sale—A nice clean stock of hardware with tinship in connection in a good town in northern Illinois. Stock will invoice from $2,500 to $3,000; only one other stock in town. A good opportunity for someone. Address Lock Box 308, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

Wanted—A desirable partner to take charge of the shop, plumbing, etc., of an old-established hardware business in Wisconsin. Sales over $20,000 per year since 1880. Can work on a salary for a time to give chance to investigate fully. Wisconsin is a good opportunity for the right party. Will require about $3,000 to $4,000 to get in. For details address "Opportunity," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

TINNERS' TOOLS.

For Sale—A complete set of tinners' tools excepting forming rolls and stove pipe crimper. Tools are in excellent condition. Cheap for cash. For particulars and price address P. E. D. Underwood, Box 309, Sullivan, Ill. 5

For Sale—Complete set of tinners' tools, cornice brakes, stock of furnaces in a city of 65,000 population; plenty of work; wish to retire from business. Will sell cheap. Address "Tacoma," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—One set tinners' tools in first-class condition. Will sell any or all. Send for list. Address Peckham & Smith, Marshalltown, Ia. 5

HELP WANTED.

Wanted—A good tinner, a young German preferred. Must understand furnace work. Must give refprences. Job open at once. Address Gust Wenzel, Merrill, Wis. 5

Wanted—Tinner; one who can clerk and work about store. To a good, sober, reliable man will give steady work. Address W. H. Baker, Benton Harbor, Mich. 5

Wanted—First-class tinner, one who can do slate and tin roofing, furnace and general shop work. Steady work for right man. Address M. Reinhardt's Sons, Lincoln, Ill. 5

Help Wanted—Tinners; good, sober young men under 40 years of age who are good fast workmen on outside tin work and slate roofing. Wages $3.00 per day of 9 hours. State full particulars in first letter. Single men preferred. Address Schiedt Bros., Zanesville, Ohio. 5

Wanted—At once, good all around tinner, one well up in furnace work and general jobbing. Good wages to right man. Address M. R. O'Neill, wholesale and retail hardware, 67 Broadway, Fargo, N. D. 5

Wanted—A good tinner and furnace man or a good tinner who wants to learn the furnace business. Write at once. Address "Furnace," General Delivery, Dubuque, Ia. 5

Wanted—Salesman visiting hardware trade to handle well established specialties on commission. Address Wilmot Castle Co., Rochester, N. Y. 4

Wanted—At once, a good all around tinner and hot air furnace man who understands gasoline stove repairing and willing to help in store when not busy in shop. Party must be sober and reliable and not afraid to work when there is work to do. Steady job year around for right man. State wages wanted and address Burrnett & Piper, Monticello, Ind. 4

Wanted—First-class tinner, married man who can do furnace work and who can do it well. Steady job the year around; good wages. Address Maher & Sons, Preston, Iowa.

Wanted—At once, a good all around tinner for in and outside work with a fair knowledge of plumbing work; state experience and salary wanted. Steady job for the right man, married man preferred. Address L. D. McQuiston & Co., Monticello, Ark. 4

Wanted—Experienced man to oversee steel range department. Address The Jehrle Co., Newark, Ohio. 4

Wanted—A good tinsmith at once. A man can figure on jobs and understands furnace work. Work all the year round. Good wages. Address W. G. Sundstrom, Iron Mountain, Mich. 3

Wanted—A tinner with four or five years' experience that is used to inside and outside work. Write giving amount of wages wanted. Address F. E. McGraw, Peshtigo, Wis. 3

Wanted—A good all round man tinner and clerk combined. One who can look after things himself and run shop to suit himself. Good job to right kind of a man. Steady employment. If you want a good job write us at once. Address E. W. Peterson & Co., Florence, Wis. 3

Wanted—A first-class enameler who is capable of taking charge of cooking van plant; must come well recommended. Address "Enameler," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

Wanted—A practical stove salesman of experience for the northern portion of Illinois. Address "P. S. S.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3

SITUATIONS WANTED.

Situation Wanted—By experienced tinsmith and furnace man, and hustler for job shop and salesman in retail business, machine agent, etc., of 30 years' experience. Would like employment as salesman for hardware, tinners' supplies, stoves, ranges and furnaces in the states of Washington, Oregon and California. Strictly temperate; 48 years old; not afraid to work. Will give references. Address "Tacoma," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

SPECIAL NOTICES.

FOR SALE OR EXCHANGE

A good live furnace business. This is a good thing for a furnaceman situated in good town of 25,000 inhabitants. As there is no real estate the machinery, etc., may be moved. Would make a good addition to foundry. Address W. A. S. care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 3t.4

IF YOU WANT

More Business—More Profit secure a license to build the Crown Ventilator and Chimney Jack on royalty. We furnish patterns, instructions, electrotypes, advertising matter, and can make it an object for you to supply the demand in your territory. Business steadily increasing. Full particulars for the asking. CROWN VENTILATOR CO., Milwaukee, Wis.

NOTICE.

We have exceptional facilities for handling American products: Hardware, Sanitary, Heating and Ventilating Goods, Branches in England and continent. References furnished. Address

EXHIBIT & TRADING CO., Main Office, 155 Duke St., Liverpool, England.

WANTED

Two good salesmen—one for Illinois and one for Indiana. Will pay good salary to practical road man of experience and ability. Address STAR SHOVEL & RANGE CO., Vincennes, Indiana. 3t.3

Great Britain

Send me your catalog and I'll sell the goods. Excellent facilities for handling all kinds of hardware specialties. References unquestionable.

P. T. STERN, 11 Queen Victoria St., London, England.

Cable Address: "Quizzing, London."

SAWS—CONTINUED.

Hand and Rip.
Brown's ....30&7½%
Disston's No. 7....30&7½%
Disston's Nos. 8, D8, 12, 76, 112, D100, and 120....25&7½%
Gorham's Comb....30&7½%
Keystone....30&7½%
Sam Sickles', hand...per doz. $4 25
"I Will," hand.... " 5 75
"I Will," rip.... " 6 75
"U. S. A." hand.... " 12 25
"U. S. A." rip.... " 14 25
Keyhole—Disston's ....25&7½%
Kitchen
Sterling....25%
One Man 50%
Panel.
Brown's ....30&7½%
Disston's No. 7....30&7½%
Disston's D100....25&2½%
"I Will" 40%
"U. S. A."....40&10&5%
Pruning.
Avery's Duplex ....25&7½%
Brown's ....25&7½%
Disston's....25&7½%
Wood.
Common....per doz. $4 50
Handy .... " 7 50
Happy Medium .... " 7 00
Wood Sawyers' Delight " 8 25

SAW SETS.

Common Lever....per doz. $ 1.20
Stillman's Lever....per doz. 1.30
Leach's....per doz. 5.00
Nash's....per doz. 4.20
Monarch....per doz. 6.50
Aikin's Pattern....per doz. 3.50

SAW FRAMES.

Common, plain....per doz. $1 20
" painted.... " 1 60

Counter. SCALES.

Fairbank's Standard....30, 10&5%
Hatch's....per doz. $21 50
Little Detective, 1 2 3
Each $2 00 2 25 2 10
No. 1 Tea ....per doz. 7 75
Union Platform....each 2 40
Pelouze ....40&10%
Turnbull's Market....50%
Platform.
Common, 600 800 1000
Each $8 20 8 75 9 50
Chicago Standard....30 to 33⅓%
Fairbank's Standard....40%
Osgood....50%

SCOOPS.

Grain.
½ Bu. "Hercules," per doz...$13 75
1 " " " " ... 15 50

Box. SCRAPERS.

Stanley's Adjustable, per doz. $3 60
Triangular .... " 2 50
Cabinet.
Ajax ....per doz. $2 25
Cast Steel .... " 65c@75c
Stanley's No. 80.... " $8 40
Road.
Cubic ft. 7 5 3
Without runners, ea. $4.35 4.10 3.85
With runners.... " 4.60 4.35 4.10

Bench. SCREWS.

Iron.... 40&10%
Wood, white maple..per doz..$3 60
Hand--Wood....20%
Hand Rail....70&10%
Jack....75&5%
Lag or Coach, ...80%
Saw—Centennial.
Nos. 1 2 3 4
Per doz.... 22c 25c 32c 36c
Wood.
F. H. Bright Steel ....87½, 10&10%
R. H. Blued Steel....85&5%
F. H Jap'd Steel....82½&5%
F. H. Brass ....85&5%
R. H. Brass ....80&5%
R. H. Nickel Plated....75%

SCYTHES.

Clipper, grain....per doz..$7 75
Dutchman, grass .... " .. 5 25
Golden Clipper, grass. " .. 5 00
U. S. A., grass.... " .. 5 75
Nail. SETS.
Round, common....per doz..$0 33
Square " .... " .. 42
Octagon " .... " .. 33
Square, Buck Bros.. " .. 1 25
Cup Point, knurled, pr doz. 70c@90c
Rivet.
Farmers'....per doz..$1 45
Tinners'....50&10%
Saw.
Aiken's Pattern....per doz..$2 50
Common Lever.... " .. 1 20
Disston's Monarch... " .. 6 50
" X Cut .... " ..11 75
German.... " .. 1 35
Morrill's Old Style... " .. 5 00
" Pattern.... " .. 4 50
Leach's.... " .. 4 80
Nash's Hand.... " .. 4 00
" X Cut .... " .. 5 50
Stillman's Lever.... " .. 1 30
" X Cut.... . 2 50

SHARPENERS--SKATE.

Diamond....per doz..$1 60

SHAVES--SPOKE.

Iron....per doz..$1 35@$2 75
Wood.... " .. 2 75@ 4 75
Bailey's....50&5%
Goodell's....15%
Stanley's Universal....30&5%

Pruning. SHEARS.

Buckeye, No. 1....per doz..$6 75
" No. 2.... " .. 8 40
California Pat., 9 in.. " .. 4 25
" 10 in.. " .. 5 00
Draw Cut, No. 3.... " ..14 75
" No. 4.... " ..17 50
Henry's Pat. 0 01 14 012
Per doz...$1.90 $2.50 $3.15 $3.50
Star....per doz..$4 75
Sheep--No. BBA.
6 in. 6½ in. 7 in.
Reg.Grip..$11.25 $11.50 $12.00
Nar.Grip.. 11.75 12.00 13.00doz.
Tinners'--See Snips.

SHEAVES—SLIDING DOOR.

In. 3 4 5
Common..Per set..$0.42 $0.48 $0.70
Hatfield's. " .. .75 1.00 1.60

SHELLERS--CORN.

Union ....per doz..$7 25

SHOT--See Ammunition.

SHOVELS AND SPADES.

Drain.
Iwan's Perfection....50%
Railroad, Etc.
Gold Hibbard's....per doz.. $9 25
C. H. Conovers's.... " .. 7 75
Beckwith's.... " .. 7 75
Hickory.... " .. 6 25
Greenleaf's .... " .. 5 75
Columbus.... " .. 5 00
Ames' new list ....Discount 12½%
Coal.
No. 2 Ajax....per doz..$5 25
No. 4 Golds.... " .. 6 25
Ames' new list....Discount 12½%
Snow, per doz....$1 65@$9 00

SIFTERS.

Hunter's Genuine.... per doz. $1.10
" Imitation.... " .90
Tin Rim, 16 mesh plain wire 1.35
Wood " 16 mesh plain wire .80

Cast Iron. SINKS.

Painted.... , 1 &5%
Enameled, White .... 60-10&10%
Wrought Steel.
Painted, new list....40-10&5%

SLEDGES--See Hammers.

SNAPS—HARNESS

Champion....65%
German Pattern....30&5%
Judd's Pattern....60&10%@70%

SNATHS.

Double Ring, Bush....per doz..$6 75
Patent Loop " .... " .. 7 30
" " Grass.... " .. 6 50

SNIPS--TINNERS'.

Hernisch's....40&5%
National....40&5%
P. S. & W. Co.'s....25&5%

SOLDER.

See Metals, Column 1

SPRINGS--DOOR.

Perfect. Nos. 1 2 3 4
Per doz.... 32c 38c 45c 48c
Reliance, Light $1.40, Heavy $2.20 doz.
Star.... " .90, " 1.30 "
Torrey's....per doz..$1 25
Warner's— No. 11 No. 13
Per doz.... 70c $1 30

SQUARES

Steel and Iron....70%
(Add for Blued, $2.50 per doz., net.)
Mitre--Stanley's No. 12 ....40%
Try.
Stanley's No. 20, new list...30&10%
" Nos. 12 and 14....40%
Try and Bevel--Stanley's....40&5%
Try and Miter.
Fox's....per doz..$7 25
Winterbottom's 50%

SQUEEZERS--LEMON.

Common Wood....per doz..$0 70
Porcelain Lined, wood. " .. 1 30
Boss, tinned iron .... " .. 82
Pearl, nickel plated.... " .. 1 30
Star " " .... " .. 1 60
Little Giant, tin'd iron " .. 4 25
King.... " .. 2 50
Drum .... " .. 4 75

STAPLES.

Blind—Barbed....per lb. 9½@10c
Butter Tub.... " 8@8½c
Fence, less than carload.
Polished....per 100 lb. $2 40
Galvanized .... " 2 70
Netting—Galvanized....per keg 3 60
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples .... 85-10&5%
Extra heavy ....75&10%

STEELYARDS.

Discount 25%

STONES.

Axe.
Hindostan ....per lb. 5½@7c
More Grit.... " 9½c
Washita .... " 18½c
Emery....60%@60&5%
Oil—Unmounted.
Arkansas Hard ....per lb. $2 00
Arkansas Soft .... " 1 15
Hindostan .... " 6½@6¾
Oil.—Unmounted.
Lily White.... per lb 42c
Queer Creek.... " 14½c
Ouachita.... " 26c
Washita.... " 25c
Sythe—Black Diamond. per gro. $7 75
Clear Grit .... " 4 25
Gem Corundum.... " 7 50
Green Mountain.... " 4 20
La Moille.... " 7 00
White Mountain....per gro. 6 50
Willoughby Lake .... " 6 25
Red End .... " 3 15

STOPS—BENCH.

Hotchkiss'....per doz. $3 60

STOPPERS—FLUE.

Common ....per doz. 42c
Crown.... " 48c
Gem, flat, painted.... " 72c
Gem, cor'd, decorated.... " 68c
Kirch's .... " $1 20
Peerless .... " 72c
Skinner's Common Sense " 95c

STRAPS.

Scoop....per doz. prs. $1 80
Skate.... " " 60@70c
Carpet. STRETCHERS.
Bullard's....per doz. $3 90
Excelsior .... " 6 00
Malleable Iron.... " 70
Perfection .... " 6 00
King .... " 4 50
Wire.
N. S. Elwood's ....per doz. $5 75
O. S. Elwood's.... " 6 00
Little Giant .... " 5 50
Star Lever.... " 6 25
Star Tackle Block.... " 9 25
Warner's .... " 6 25

SWIVELS.

Malleable Iron ....per lb. 5½c
Wrought Steel....per gro. $4 50

TACKS.

American Cut....90&5%
American Wire....85&25&10%
Bill Posters Cut .... 90&40%
Blued Carpet....90&15%
Tinned Carpet....90&15%
Gimp ....90&30&10%
Upholsters' Cut ....90&40&5%
Upholsters' Wire ....90&25%
Double Pointed ....90&20%
Copper ....per lb 27c
Canvas Nails....75&5%
Clout Nails....75&10&5%
Hungarian Nails....80&5%

TAPES--MEASURING.

Asses' Skin ....40&10%
Bend Leather....25%
Patent Leather....25%
Lufkin's Steel....30%
Lufkins Metallic 30%

THERMOMETERS.

Tin Case....per doz., 95c@$1 25
Wood Back.... " $1 75@ 9 00
Glass .... " 15 50

Bale. TIES.

Single Loop.... 80%
All other kinds....70%
Cow--See "Chains."

TOOLS—SAW.

Atkin's Dexter....per doz. $4 25
Atkin's Excelsior.... " 6 25
Disston's Universal 40%
Simond's Crescent....per doz. $14 00
Game. TRAPS.
Newhouse....50%
New Victor 75-10%
Mole—Reddicks ....per doz. $5 75
Mouse and Rat.
Wood Choker....per hole 11c
Tin Choker .... " 9c
Delusion....per doz. 85c
Imitation Sight, Rat .. " 80c
Marty Rat.... " $6 75
Marty Rat, Imitation.. " 3 75
Marty Mouse.... " 3 15
Marty Mouse, Imitation " 2 10
French Automatic.... each $3 60
Fly.
Balloon....per doz. $1 10
Harper's.... " 1 25
Brick. TROWELS.
Standard....30%
Brade's....10&7½%
Disston's....30%
Rose's....25%
Plasterers'.
Standard 33⅓%
Disston's....30%
W. & McP....25%

TRUCKS.

Bags....each $1 70
Handy.... " 1 50
Warehouse....60&5%
No. 1 2 3
Half Ironed....$2.60 $3.40 $5.00
Full Ironed.... 3.90 5.75 6.75

TUBS-WASH.

No. 2 3 1 Ex. large
Standard, per doz. $5.25 6.25 7.25 9.75
Dowel .... " 5.60 6.60 7.50 10.00
Cedar .... " 6.50 7.50 8.25
Indurated. " 7.20 7.95 9.45 11.70
Galvanized. No. 1 2 3
Per doz $5.25 5.75 6.50

TWINE. per lb.

3-ply Cotton Wrapping....21c
4 " " " 21c
4 " Cotton Extra Wrapping....27c
4 " " " Hvy. Wrap'g.26c
4 " " Wrapping on tubes.23c
3 " " " " cones.23c
4 " " " " " 23c
India Hemp, ¼-lb. balls....18c
" " ½-lb. " 17c
" " ¼-lb. " ...doz., 65c
2-ply " ¼-lb. " 11½c
3 " " ½-lb. " 11½c
Jute Wrapping, ½-lb. balls....11½c
Jute Wool, 1-lb. balls.... 6c
Seine. Nos. 6 9 12 15 +
Soft, per lb. .25 .24 .23½ .23
Med. " " .24 .23½ .23
Hard " " .27 .25½ .24½
Staging, ¼-lb. ball, size 21....23c
" ¼-lb. ball, " 24....23c
" ¼-lb. ball, " 27....23c
Bagging, ¼-lb. ball.... 23c
3-ply "B" in hanks....19c
4 " "B" " 19c
3 " "A" " 39c
3 " Silver Finish, in hanks....39c
Fodder or Lath.
130-strand.... 8c
200-strand.... 8½c

VISES.

Bonney's....30%
Cheney's....20%
Parker's Oval Slide....
....50, 10, 2½% @ 50, 10, 5, 2½%
Parker's Parallel....15@20%
Parker's Victor....10%
Parker's Combination....50&10%
Solid Box....60&5%
Adam's Mechanics'....each $2 65
Williamson Universal.... ..20%

WARE,

Cast-Iron Hollow.
Ground .... 40, 10&2½%
Unground....50, 10&2½%
Extra Finished....40&10%
White Enameled....50, 10&5%
Maslin Kettles....65%
Enameled.
Cherry Blossom....33⅓%

WASHERS.

Standard O. G. cast iron, per lb..2½c
Wrought iron in bulk per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
7¾c 5½c 4c 3¾c 3½c 3½c 3½c
Wrought steel in 5 lb. boxes, per lb.:
In. ¼ ⅜ ½ ⅝ ¾ ⅞ 1
8¼c 6½c 5c 4¾c 4½c 4½c 4½c

WEDGES.

Ax....per doz....30c
Galling....per lb..10½c
Saw.... " .. 8½c
Calf. WEANERS.
Fuller's. per doz.....$2 00 to $2 50
Tyler's Safety, per dz 1 85 to 2 40
Carroll's, per doz.... 2 50 to 3 25
Standard, per doz.... 2 75
Hoosier, per doz.... 3 10 and 4 15

WEIGHTS.

Hitching....per lb..2½c
Sash--F.O.B. Chicago..pr ton..$20.00

WHEEL BARROWS.

Common Railroad....per doz..$16 00
Heavy " .... " .. 19 50
Railroad, ball bearing " .. 19 00
Santiago Steel Tray.. " .. 26 50
No. 04 Steel Dirt ... " .. 47 00
No. 04½ " " ... " .. 50 00

WHEELS.

Corundum....70&10&5
Emery....75&5%
Well. In. 8 10 12 14
Per doz.... $1.90 $2.20 $3.00 $5.50

WIRE.

Barbed. Painted. Galv'd.
Carloads...pr 100 lbs..$2.4 $2.75
Less than car " .. 2.5 2.85
Brass.
In coils.... 20%
In 1 lb. spools, new list....50&10%
Broom--Tinned....60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils....20&10%@33⅓%
In 1 lb. spools, new list....50&10%
Fence--Smooth.
Nos. 6 to 9, Annealed, pr 100 lbs. $2.15
Nos. 6 to 9, Galv'd... " 2.45
Hair--New list....50&10%
Market.
Bright. full bdles....70&10%
Bright. broken bdles....70%
Coppered, full bdles....70%
Coppered, broken bdles ....65&10%
Tinned, full bdles.... ....70&5%
Tinned, broken bdles....65&10%
Picture.—In coils....,.80% @80&10%
In 5 lb. spools ....per lb..26c
Plain—Small lots....$2.00
Car lots.... 1.95
Small spools 5c per hundred higher

WRENCHES.

Acme Standard....60%
Alligator....65&5%
Always Ready....40&10&5%
Bemis & Call....40%
Coe's Standard....40&10%
Girard's Agricultural.... 75&10%
P. S. & W. Co.'s Agricultural 75&10%
" " " Knife H'dle..50&5%
Wescott's "S"....33⅓%
Malleable "S"....per lb. 05½c
Malleable....per lb. 05½c
Stillson Pipe....60&5%
Trimo " 60%

Clothes. WRINGERS.

No. 23, Guarantee....pr doz. $18 50
No. 110, Guarantee.... " 29 50
No. 110, Brighton .... " 21 50
No. 23, Pioneer.... " 20 50
No. 2, Superb.... " 19 50
No. 730, Easy.... " 26 00
No. D 110, Domestic... " 25 50
No. E 350, Empress... " 28 50
No. 122, Bicycle Ball-bearing.... " 31 50
No. 122, Swan .... " 27 50

Wants and Sales:

For yearly subscribers to THE AMERICAN ARTISAN will be inserted under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they read the advertisement in THE AMERICAN ARTISAN.

BUSINESS CHANCES.

PATENTS

HUBERT E. PECK, 623 F St., N. W., Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications." Honest work but no "Something for Nothing" offers.

Wanted—I want $7,000 to $10,000 stock hardware or general line, and have 400 acre farm to exchange for the same. Address "Box 217," care THE AMERICAN ARTISAN, Chicago. 6

For Sale—An up-to-date stock of stoves and house furnishing; all new goods. Centrally located on main business street in a city of 30,000 population in eastern Ill. Long lease at a cheap rate on a large building. A big stove business already established; over 400 stoves sold last year. A big money maker for some one wishing to put in a line of hardware. Best of reasons for selling. For details address "Box D," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 6

For Sale—My stock of hardware, stoves, tinware and tinners' tools and stock of about $2,000 in a town of 500 in the best farming and dairy countries of Ill. A good trade and will rent good brick store building for a term of years. Best location in town. This is a good chance for a tinner with small capital. Address "Good Chance," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 6

For Sale—A good tin and plumbing shop doing a good business. Will sell at a bargain if taken soon. Good reason for selling. Address Lock box 25, Minerva, Ohio. 6

For Sale—An up-to-date tin and furnace business in Denver, Colo. Best location in the city. Established 12 years. A full set of tools including brake. Will sell for $1,200 or at invoice, $900 down and balance at $25 per month. Address the Allison-Hill Tin, Sheet Iron and Furnace Co., Denver, Colo. 6

For Sale—A first class stock of hardware and fixtures cheap. This is a fine stand and good business town. It will pay you to investigate this proposition. Principals only. Address "Box 290," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 6

For Sale—In north central Iowa, a good, clean stock of hardware; tin shop in connection. Last invoice $3,300. Business last year $12,000. Reason for selling, wish to go west. Address "F. M. R.," Box 416, Dows, Ia. 6

For Sale—A nice clean stock of hardware, about $3,500, in a nice town in Iowa, population of town 3,500. Good country around. Good crops. Only one other hardware. Best of reasons for wanting to sell. Address Lock Box 685, care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—Tinshop. Good trade. All two men can do. For further information address F. Kimmel, Parsons, Kans. 5

For Sale—In western Iowa, a nice clean stock of hardware with stoves and tinshop. Large town. Fine cash trade. Failing health. Address "Western," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—Stock of clean up-to-date hardware invoicing about $5,000. Can be reduced without harm to business. Stock is located at Heron Lake, Minn. If you are looking for a good opening for hardware business, look this up. A chance to make some money. For particulars address Ebert Hardware Co., Truman, Minn. 5

For Sale—A new up-to-date hardware stock in one of the best towns in central Illinois; $12,000 business last year. Good reasons for selling. Address "J.," care of THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

TINNERS' TOOLS.

For Sale or Trade—A good nickel plated tinners' rule that cost $2.50 wholesale. Will accept $2 for it. Not been used any. Write what you have to trade. Address J. V. Steenberger, Pender, Nebr. 6

Wanted—Groover, 30 in., for 24 and lighter sheet iron. Must be in good working order and price reasonable. Address F. G. Reineck, 2119 W. 12th st., Chicago, Ill. 6

For Sale—A complete set of tinners' tools excepting forming rolls and stove pipe crimper. Tools are in excellent condition. Cheap for cash. For particulars and price address P. E. D. Underwood, Box 309, Sullivan, Ill. 5

For Sale—Complete set of tinners' tools, cornice brakes, stock of furnaces in a city of 65,000 population; plenty of work; wish to retire from business. Will sell cheap. Address "Tacoma," care THE AMERICAN ARTISAN, 69 Dearborn St., Chicago, Ill. 5

For Sale—One set tinners' tools in first-class condition. Will sell any or all. Send for list. Address Peckham & Smith, Marshalltown, Ia. 5

HELP WANTED.

MAN—ENERGETIC, willing to learn, under 35, to prepare for Gov't Position. Beginning salary $800. Increase as deserved. Good future. I.C.I., Cedar Rapids, Ia. Enclose stamp.

Wanted—Man who has had 1 year or more experience in roofing and guttering; one who would like to complete tinners' trade and learn furnace and windmill work with a good mechanic. Write at once, stating wages wanted. W. W. Anderson, Atwood, Ill. 6

Wanted—Experienced stove salesman for city and suburbs, also one for country References from last employer. Address "References," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 6

Wanted—A man who can do tin work and plumbing; steady job; good wages. Address Grey & Bennett, Flandreau, S. D. 6

Any sober, competent and industrious journeyman tinner desiring a steady job will find it to his interest to address H. G. Cormick, Centralia, Ill. 6

Wanted—A first class tinner. Will give a part interest in business to right man or will sell the whole. Address "Hardware," care THE AMERICAN ARTISAN, 69 Dearborn st., Chicago, Ill. 6

Wanted—A good tinner, a young German preferred. Must understand furnace work. Must give references. Job open at once. Address Gust Wenzel, Merrill, Wis. 5

Wanted—Tinner; one who can clerk and work about store. To a good, sober, reliable man will give steady work. Address W. H. Baker, Benton Harbor, Mich. 5

Wanted—First-class tinner, one who can do slate and tin roofing, furnace and general shop work. Steady work for right man. Address M. Reinhardt's Sons, Lincoln, Ill. 5

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Wanted—A good tinner and furnace man or a good tinner who wants to learn the furnace business. Write at once. Address "Furnace," General Delivery, Dubuque, Ia. 5

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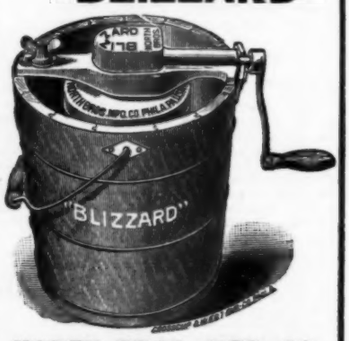

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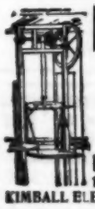

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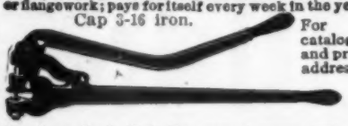

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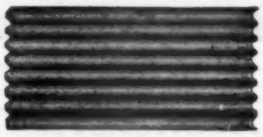

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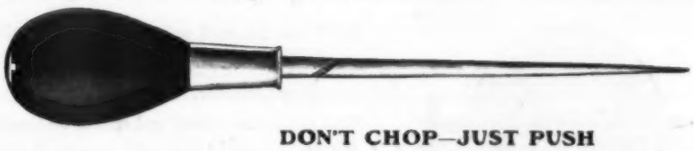

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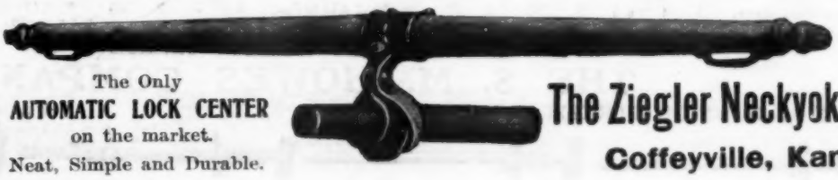

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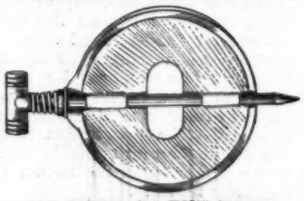

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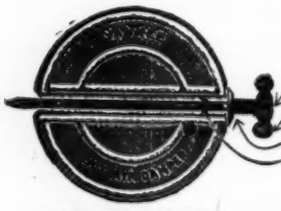

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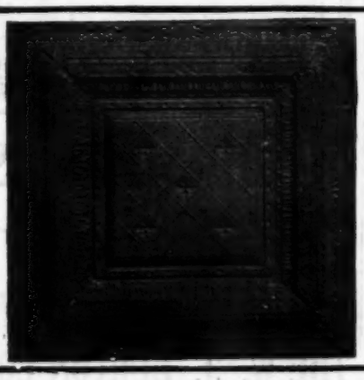

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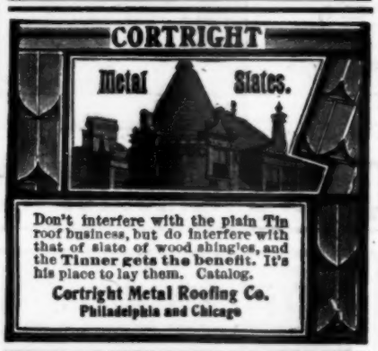

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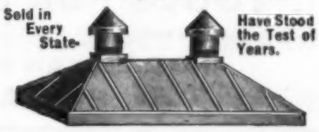

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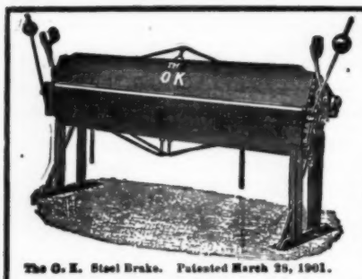

The O. K. Steel Brake. Patented March 26, 1901.

BEATS THEM ALL.

Visitors to the World's Fair interested in Sheet Metal Work are invited to give us a call in Section 13, near front entrance in Machinery Building.

WATCH FOR THE NEXT.

Sold by H. Weiss & Co., 20 Cliff St., New York, N. Y. Janney Semple, Hill & Co., Minneapolis, Minn.; C. Sidney Shepard & Co., St. Louis, Mo., etc.; Illinois Roofing & Supply Co., Chicago, Ill.; New Orleans Roofing & Metal Works, New Orleans, La.; Peden Iron & Steel Co., Houston, Texas; Holbrook, Merrill & Stetson, San Francisco and Los Angeles, Cal.

Will not warp like wood.

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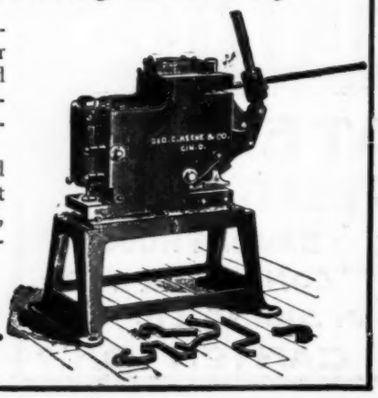
Combination Machine

For Shearing, Punching, Bending, and Forming.

This MACHINE is a very substantial tool, especially adapted for shearing, punching, bending, and forming stays and braces for cornice or other work where it is desire to use band iron.

It is very powerful and is fitted with compound levers—made of cast steel. Will cut, punch, form, round and bend any shape ¼ x 2-inch band or bar iron.



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NOISELESS, NO ODOR, NO SMOKE

More Heat with Less Fuel.
Greatest Range of Heating. 3 to 12 lb.
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Order direct of your Jobber, or we will ship direct for $6.50.

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"Canton" Metal Ceilings are labor savers and patron pleasers. Are best and cheapest "because the construction is right." Classified designs. Ever see our Art Book "G"? It shows the goods.

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ASK YOUR DEALER FOR THE

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Soldering Furnace

AND YOU WILL MAKE NO MISTAKE

Always ready—No Smoke—No Odor—No Noise—Unexcelled—Unequaled—Unrivaled—Safe—Sure—Durable.

TIN, BRASS OR COPPER RESERVOIR Equipped with Cylindrical Slotted Burner.

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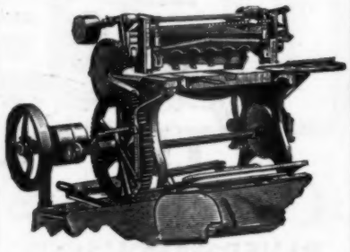

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ONE OF THE 46 KINDS,

and a good one at that is the **No. 38 Torch.** In fact we consider it the best pint size Torch made having soldering iron holder. **Our new catalog tells all about it.** If you contemplate buying a fire pot or torch **be sure** and send for it, **as it contains valuable information that is worth dollars to you** and describes our complete line. Our many years experience backed by an honest desire to excel has enabled us to make and sell our line under the guarantee "Your money back if you are not pleased." Jobbers sell at factory price.

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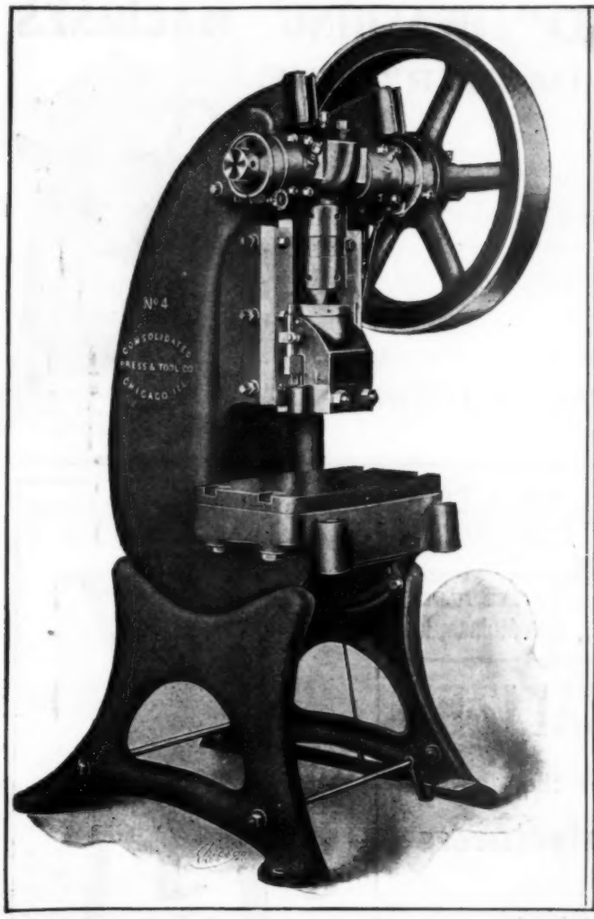

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Special Machinery and Sheet Metal Tools of every description

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We have the best equipped shop in Chicago for building fine special machines. *COME AND SEE.*

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THE "WHITE DASHER" LINE

Burner Boiling Water
With Washer in Operation

Lest You Forget—

It is absolutely Rust-Proof.
Water may be boiled with washer in operation.
We permit only one agency in a town.

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QUINCY WASHING MACHINE CO.,
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White Porcelain
Enameled Iron Dasher
Note Balance Wheel

$25 ON 5 TON
Is what you can save
We make all kinds of SCALES.
WRITE FOR PRICES
Also B. B. PUMPS and WIND MILLS
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EXPECTATIONS REALIZED

We are now the
Largest Manufacturers
in the world
of any one style of
ROTARY WASHER
What is the reason? Ask us.

WHITE LILY WASHER CO.
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Peoria Washing Machines

Best in the Market—Made with Ball Bearings

Have a Compound Lever Handle which greatly reduces the work of wash days. The motion used in vibrating the handle takes the strain from the back and lets the arms do the work with a great reduction in labor.
Send for Catalogue. Secure the Agency.

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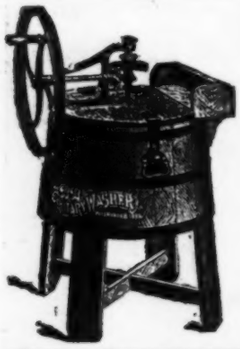

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the best washer on earth is the
"B B" Roller Gearing Rotary
Has case-hardened rollers, is noiseless, made of kiln-dried red cypress lumber, corrugated staves and bottom, has many more excellent features.
WORKS SO EASILY A CHILD CAN OPERATE IT.
A SAMPLE PROVES IT
THE BENBOW-BRAMMER MFG. CO.,
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Sales last season were more than double those of the previous season. Dealers everywhere are enthusiastic over the sale of the Hustler. Orders should be placed at once to insure prompt delivery. Shipments made previous to Sept. 15th will bear that dating.

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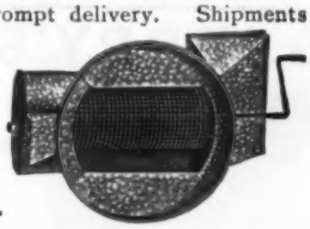

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More Goods at Less Cost

That is just what it means to you.

You can handle your goods cheaper, easier and quicker on our low down, short turn delivery wagons than on any other kind. See cut of gear. Body is low down, only 20 inches from ground, and is full width. Full height wheels in front, making light draft, yet on account of our Patent Short Turn Gear it will turn shorter than a high cut under. **Easy to load.** One man with our wagon can do the work of two with a high wagon. **Draft is light.** One horse can haul big load. **Short turn** so can get around in alleys and crowded streets. **A good ad** and an economical investment.

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It means that no up-to-date, economical merchant can afford to buy or use any other wagon. We make the only successful short turn low down wagon on the market. That we have proven to thousands. **We make them to order** as good, as durable and as satisfactory as the best of material and superior workmanship can produce. Built to run every day, everywhere, and to stand up.

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Estimates furnished upon receipt of samples.

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Twelve sizes always in stock.

Full measure, guaranteed perfect, original patterns, with metal distributed where it is needed. Many Caldrons are made from our castings as patterns. They are inferior to originals, as they have light bottoms and heavy sides and hold less.

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DRIES CLOTHES, WOOLEN OR COTTON, IN 15 TO 30 MINUTES,

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Handsome, Rigid, Durable

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Catalogue shows it. Get one.

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Make More Money

Rural Routes are going in all around you. New boxes are needed on old routes. You should get this business. You *can* get it with

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Manufactured by

THE GALESBURG CORNICE WORKS

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CONNECTING CLEVELAND and BUFFALO "WHILE YOU SLEEP"

UNPARALLELED NIGHT SERVICE. NEW STEAMERS.

"CITY OF BUFFALO" and "CITY OF ERIE"

Both together being, without doubt, in all respects the finest and fastest that are run in the interest of the traveling public in the United States.

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LEAVE		ARRIVE	
Cleveland	8 P.M.	Buffalo	6:30 A.M.
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Connections made at Buffalo with trains for all Eastern and Canadian points, at Cleveland for Toledo, Detroit and all points West and Southwest.

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Ask Ticket Agents for tickets via C. & B. Line Send four cents for illustrated pamphlet.

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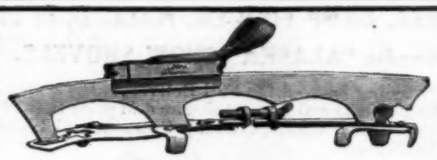
J. W. Chandler, Lily Lake, Ill., writes:

"Please take my ad out of your paper for a timer. I have received answers from Brooklyn to California. I think I ought to be able to pick out one."



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Send for the Green Book of Hardware Specialties for prices and particulars. Dept. S.

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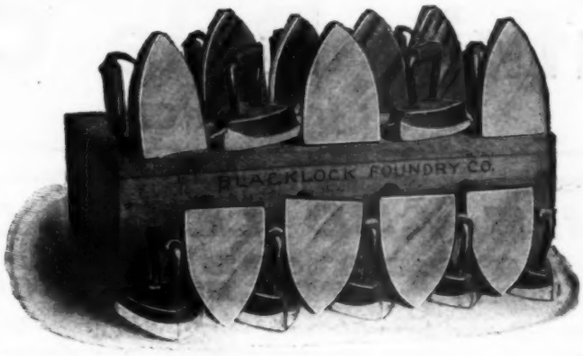

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SEE THAT THE NAME BLACKLOCK IS ON HANDLE OF EVERY IRON YOU PURCHASE.

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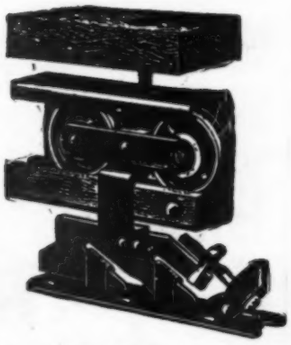
RICHARDS AUTO



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We make all the leading styles of door hangers for sliding doors. Catalogue free.

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6¼ inches long. Jaws take from 7/16 to ¾. Cuts bolts for pump rods.

SPECIAL WRENCH FOR PUMP RODS.

Has more uses than any wrench made.

You can't break the jaws off this wrench.

Will Remove 'NEVERSLIP" and "ROWE" CALKS
The Best Wrench Made

Every one buys **HAWKEYE WRENCH** on sight; all that's necessary to sell it is to show it. It should be in every Hardware Store. Be the FIRST in your town to have it in stock.
SOLD BY ALL JOBBERS.

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Made in two styles—different size thread for Pump Rods.

IMPROVED Oblique Tumbling Barrel

Barrel can be adjusted to run in any desired position, thus rattling the parts more or less violently to suit the material from which they are made.

Send for Catalogue A.

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WE HAVE THEM
SIZES, ONE EIGHTH TO TWO INCHES.
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3 and 4 Days Lake Trip $13
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Write about it
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SOLID STEEL, DROP FORGED, MALL. D. or Plain Long Handle "ALASKA" SNOW SHOVELS.

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Don't forget us entirely when on the market for cabinet makers tools of all kinds, or hand screws as they are specialties of ours.

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Brass Finished, Nicely Decorated.

The best flue stop made. Sold with a positive guarantee to be absolutely soot proof. It cannot be jarred or blown from the flue hole.

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TO ALL POINTS EAST AND WEST
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WORLD'S FAIR, ST. LOUIS
DAILY SERVICE, MAY 26th

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DETROIT AND BUFFALO
Leave DETROIT Daily - 4.00 P. M.
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Connecting with Earliest Trains for all Points in NEW YORK, PENNSYLVANIA and NEW ENGLAND STATES.
Leave BUFFALO Daily - 5.30 P. M.
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Rate between Detroit and Buffalo $3.50 one way, $6.50 round trip. Berths $1.00, $1.50; Staterooms $2.50 each direction.
Send 2c Stamp World's Fair Illustrated Pamphlet.
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First-class, Second-class, Tourist Special, Conventions (World's Fair, St. Louis) reading via Grand Trunk Ry. or Michigan Central Ry. between BUFFALO and DETROIT will be accepted for Transportation on D. & B. Stms. { *A. A. Schantz, G. S. & P. T. M., Detroit, Mich.*

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THE BAR-KEEPER'S "FRIEND"
FOR SCOURING, CLEANING AND POLISHING
BAR FIXTURES, DRAIN BOARDS
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THE BAR-KEEPERS' FRIEND.

BARKEEPER'S FRIEND
Marble, Glass, Nickel, Brass, Copper, Tin and German Silver
can all be cleaned and polished with it easier than with anything else.
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UNION BRICK BONDS
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THE LATEST IMPROVED CREAM SEPARATOR.

The best cooling process. The milk tank is detachable.
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The cheapest and best deep setting Separator on earth.
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THE KING
Cream Separator
separates all the cream. No cranks to turn, no crocks or pans to wash, no skimming to do, no water mixed with the milk. Highest points secured on butter, several thousand sold last year, all giving good satisfaction, price within the reach of all. Write for terms and prices. Mention this paper.
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Contractors and Manufacturers of
Metal Specialties
LIGHT MACHINERY,
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SMALL BRASS PARTS,
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A full line of the best styles of pocket and pen knives, made from Wardlow's best steel, guaranteed equal in quality and finish to any goods in the world. Also a large line of both one and two-hand Pruning Shears, all high-grade goods.

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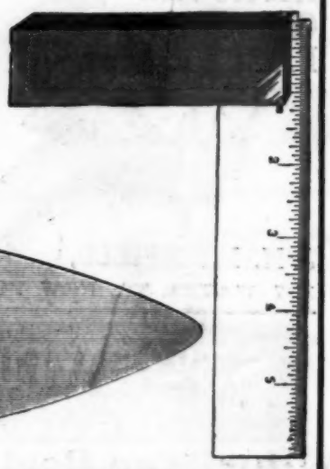

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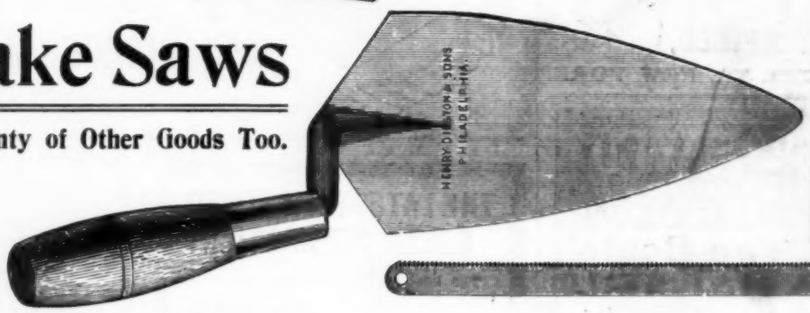

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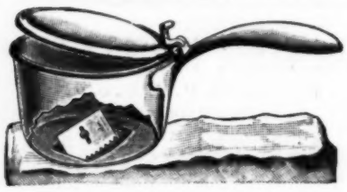
ICE SHREDDERS
For Shaving Ice, Coarse or Fine.



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Rapid Grinding and Pulverizing Mills
45 Sizes and Styles for Hand, Steam and Electric Power.

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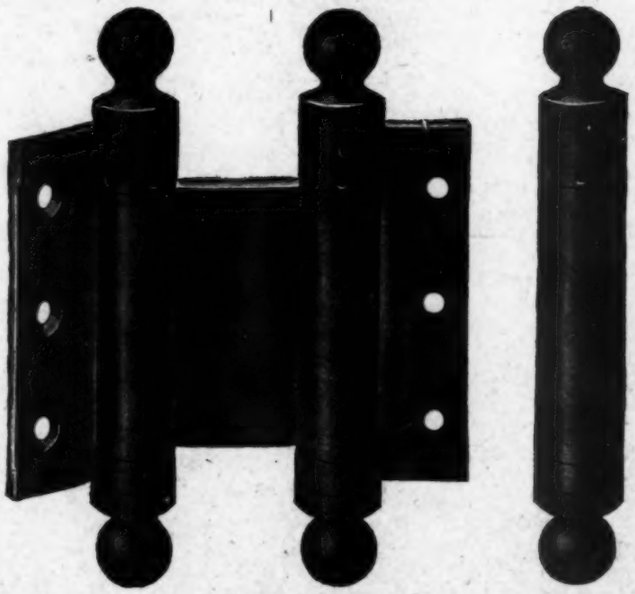

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